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PORT OF SAN FRANCISCO

Waterfront Plan Advisory Board

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Writer

August 12, 1992

Waterfront Plan - Phase One

MEMORANDUM

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TO: Interested Parties

FROM: Waterfront Plan Staff

RE: Preliminary Land Designations for Water-dependent Activities on Port Properties

As you may be aware, the Port has been engaged in evaluating the land-related needs of water-dependent activities on Port property, which constitutes the first phase of the Waterfront Plan. The enclosed narrative document and accompanying map represents the first draft of preliminary land designations for water-dependent activities, prepared by staff.

The land designations are based on information learned from the industry research papers and public meetings held by the Waterfront Plan Advisory Board with industry representatives, and the assessment of land-related needs articulated in the summary statements and land use evaluation matrices produced for each water-dependent industry, which was distributed earlier for your review and comment.

Your participation in the Waterfront Plan process is actively invited. We are soliciting your comments on this preliminary map for water-dependent activities at least through the month of August. Upon concluding Phase One, we will begin Phase Two, which will consider non-maritime land uses for those sites that have not been reserved for water-dependent activities. The third and final phase of the Waterfront Plan process will reconcile the land use recommendations from the first two phases to produce an implementable plan that meets existing and future needs of water-dependent activities, as well as provides for other use opportunities and public benefits.

This preliminary map and accompanying commentary was presented to the Advisory Board at its last meeting on August 4th. The Advisory Board is scheduled to engage in substantive discussion of this draft at its meeting on September 1st. If you have any questions or comments to offer on the preliminary Phase One map or the Waterfront Plan, it would be best to convey them at that meeting or before. Feel free to contact Diane Oshima at 274-0553 or Larry Florin at 274-0544 with your comments. Thank you for your involvement.

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WATERFRONT PLAN - PHASE ONE
PRELIMINARY LAND DESIGNATIONS FOR WATER-DEPENDENT ACTIVITIES
KEY TO MAP
(DRAFT: August 1992)

The proposed Phase One designations on the attached map are intended to accommodate the land-related needs of water dependent industries, as identified during the recently completed Phase One planning sessions. The attached map and chart consist of draft designations for public review purposes only. Each of these designations will be subject to further review and possible modification during subsequent phases in the planning process.

The primary function of this map is to help the Advisory Board define the land area that will be the subject of the Phase Two planning process (i.e. the land that does not need to be set aside for water-dependent industries). The various water-dependent activity groups are color-coded on the map. These colored designations do not describe precise areas at this time; they are intended to show the general areas to accommodate water-dependent activities. The attached charts accompany the map in order to provide a detailed explanation of each of the designations.

I. Primary Uses

Each of the primary uses that were analyzed during the Phase One process are identified below. In addition to the identified primary use, the colored designations would permit those support service and ancillary functions which are necessary for the primary use to continue to operate. For example, the cargo-related category includes, in addition to primary cargo facilities, support functions such as cargo sourcing areas, equipment storage, warehousing, employee parking, etc. that are critical to continuing cargo operations at the Port. The colored designations indicate that either the primary use or the support service uses for that industry would be appropriate on a given site.

The sites designated on the attached map do not accommodate all of the needs of support services that were identified during the Phase One planning process. As part of the subsequent planning phases, we intend to identify opportunities for shared uses, that can accommodate some of the remaining demand for support services (especially parking).

A solid color on the map means that the proposed designation is either 1) a water-dependent use or related support service that currently exists on the site and should continue in the long term; or 2) a new expansion area that responds to land needs identified in the Phase One planning process. Some of these areas have already been established as potential sites for expansion through an official policy action taken by the Port. The expansion areas have a red outline around them.

A hatched color means that this is a tentative designation that should be reviewed further during the Phase Two planning process. Sites have been given a tentative designation either because 1) although the site is currently used for a certain function, it may not represent the most appropriate long-term use of the site, or 2) the site may be an appropriate location to accommodate a need identified during Phase One, however alternative uses for the site should be considered during the Phase Two discussions in order to determine if the tentative designation represents the "highest and best" use for that site.

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An uncolored area indicates that this site will be reviewed and a designation will be made during Phase Two.

II. Primary Use Categories

Cargo-related (Blue)
Consists of all primary, support and ancillary operations necessary to serve the cargo shipping industry, for example: shipping terminals, warehouses, equipment storage, cargo sourcing, container freight stations, administrative functions, employee parking, ship servicing, bar pilots, ship chandlers, environmental services and Port maintenance activities. This use category also includes an assumption that any necessary truck and rail access to the designated sites through other Port property not included inthe blue colored designation is provided.

Fishing-related (Aqua)
Consists of all primary, support and ancillary operations necessary to serve the fishing industry and fishing related activities, for example: commercial and sport fishing harbor and berthing area, fish processing and distribution and support services such as chandlers, parking, administrative functions, fuel dock and Port maintenance activities.

Recreational Boating and Water Use (Orange)
Consists of all primary, support and ancillary operations necessary to serve recreational boating and water users, for example: small boat marinas, public and private motorized and non-motorized boat launching, small boat repair, dry storage, services such as a fuel dock, and related support activities such as visitor parking, administrative offices, convenience stores, storage and public facilities (restrooms, lockers, etc.).

Ferry and Excursion Boats (Yellow)
Consists of all primary, support and ancillary operations necessary to serve commuter ferry and excursion boat operations, for example: berthing areas and auxiliary support facilities such as administrative space, sotrage, parking and public facilities.

Ship Repair (Green)
Consists of all primary support and ancillary operations necessary to serve the ship repair industry, for example: dry dock facilities, medium sized boat repair operations, storage area, employee parking, warehousing and workship areas, berthing space for topside work and administrative offices.

Cruise (Grey)
Consists of all primary support and ancillary operations necessary to serve the cruise industry, for example: a cruise terminal facility and ancillary uses such as visitor parking, passenger servicves, restaurants, public facilities, ship servicing, bus and taxi staging areas.

Historic Ships (Brown)
Consists of all primary, support and ancillary operations necessary to serve historic ships, for example: berthing areas, a museum, parking, storage space, public facilities and maintenance shop facilities.

NOTE: Areas for temporary berthing and mooring needs, and recreational swimmers have not been specifically addressed in these designations. It is not anticipated that specific sites will be designated for these uses, but that policies will be established at the end of Phase Two, for developing certain sites in a way that will allow for accommodation of these uses.

WATERFRONT PLAN - PHASE ONE: PROPOSED DESIGNATIONS
FOR WATER-DEPENDENT ACTIVITIES
(DRAFT: August 1992)

CARGO RELATED ACTIVITIES

I. PROPOSED DESIGNATIONS: Existing sites that should continue in carto-related use and new expansion sites (solid blue)

Existing sites: Piers 15-17, 19-23, 27-29, 48, 80, 90, 92, 94, 96, eastern portion of Pier 9, northern portion of Pier 50, southern portion of Pier 70, SWL 337 (adjacent to Piers 48 and 50), SWL 349 (adjacent to Pier 70), portion of SWL 344 (adjacent to Piers 90 and 92) and portion of SWL 352 (adjacent to Pier 94)

New sites: 100 acre reserve adjacent to Piers 80, 94, 96 (including Western Pacific property, portions of SWL 344 and 352), southern portion of Pier 50 (if ship repair should no longer need the site), SWL 354 along Islais Creek (unless traded for the "Burns" property).

II. TENTATIVE DESIGNATIONS: Pending further review (hatched blue)

Piers 26, 28, 31, 36, 38, 46B, 54 (These sites could help to meet the needs identified during Phase I for support services for cargo-related industries, including port maintenance operations currently located on Pier 46B. Whether cargo related activities represent the "highest and best" use of the site should be evaluated during Phase Two)

III. EXISTING SITES THAT SHOULD NOT CONTINUE IN CURRENT USE IN THE LONG-TERM

None

IV. AREAS OUTSIDE OF PORT JURISDICTION THAT COULD BE DESIGNATED (not mapped)

Hunters Point Shipyard, Warm Water Cove, "Burns" property, miscellaneous privately owned parcels adjacent to the 100 acre reserve adjacent to Piers 70-80 (as per BCDC Seaport Plan)

FISHING RELATED ACTIVITIES

I. PROPOSED DESIGNATIONS: Existing sites that should continue in fishing-related use and new expansion sites (solid aqua)

Existing sites: Piers 45, 47, Hyde Street Harbor, Fish Alley, Wharf J7, Pier 54 (seasonal use for herring fishing)

New sites: None

II. TENTATIVE DESIGNATIONS: Pending further review (hatched aqua)

Portion of Pier 33

III. EXISTING SITES THAT SHOULD NOT CONTINUE IN CURRENT USE IN THE LONG-TERM (not mapped)

Pier 28 (site is in temporary use as a fish handling area until completion of the Pier 45 project)

IV. AREAS OUTSIDE OF PORT JURISDICTION THAT COULD BE DESIGNATED

None

RECREATIONAL BOATING AND WATER USE

I. PROPOSED DESIGNATIONS: Existing sites that should continue in recreational boating and water use and new expansion sites (solid orange)

Existing sites: Waterside of China Basin Street south of Pier 50 to Mariposa Street (except Pier 54) including SWL 345 ("The Ramp"), South Beach Marina, Pier 39, Mission Creek.

New site: Waterside portion of Pier 68

II. TENTATIVE DESIGNATIONS: Pending further review (hatched orange)

Various (It is anticipated that policies will be established as part of Phase Two for developing certain sites that would accommodate additional areas for recreational swimmers and other recreational water users).

III. EXISTING SITES THAT SHOULD NOT CONTINUE IN CURRENT USE IN THE LONG-TERM

None

IV. AREAS OUTSIDE OF PORT JURISDICTION THAT COULD BE DESIGNATED

India Basin, Presidio

FERRY AND EXCURSION BOATS

I. PROPOSED DESIGNATIONS: Existing sites that should continue in ferry and excursion boat use and new expansion sites (solid yellow)

Existing sites: Piers 1/2, 39, 41, 43 1/2, Ferry Plaza

New sites: Piers 3 and 5

II. TENTATIVE DESIGNATIONS: Pending further review (hatched yellow)

Pier 31 1/2 (Currently in use as an excursion boat area, however may not be ideally suited for this use; designation of Piers 3 and 5 may provide an opportunity to replace the use on this site)

III. EXISTING SITES THAT SHOULD NOT CONTINUE IN CURRENT USE IN THE LONG-TERM

None

IV. AREAS OUTSIDE OF PORT JURISDICTION THAT COULD BE DESIGNATED

None

SHIP REPAIR

I. PROPOSED DESIGNATIONS: Existing sites that should continue in current use and new expansion sites (solid green)

Existing sites: Pier 70, southern portion of Pier 50
- o Pier 50 would be designated for cargo-related use if it ceases to be used for ship repair

New sites: None

II. TENTATIVE DESIGNATIONS: Pending further review (hatched green)

Pier 38 (Currently in occasional use as a ship repair facility by some of the smaller ship repair companies. It may be possible to accommodate this occasional use in a shared facility in a different location.)

III. EXISTING SITES THAT SHOULD NOT CONTINUE IN CURRENT USE IN THE LONG-TERM

Upland portion of Pier 70 (this portion of Pier 70 has not been in active use as a ship repair facility).

IV. AREAS OUTSIDE OF PORT JURISDICTION THAT COULD BE DESIGNATED

Hunters Point Shipyard, India Basin (for medium sized boats)

CRUISE

I. PROPOSED DESIGNATIONS: Existing sites that should continue in cruise-related use and new expansion sites (solid grey)

Existing sites: None

New site: Piers 30-32

II. TENTATIVE DESIGNATIONS: Pending further review (hatched grey)

None

III. EXISTING SITES THAT SHOULD NOT CONTINUE IN CURRENT USE IN THE LONG-TERM

Pier 35 (Interim use of Pier 35 as a cruise terminal facility will need to continue until completion of a new cruise terminal facility on Piers 30-32)

IV. AREAS OUTSIDE OF PORT JURISDICTION THAT COULD BE DESIGNATED

None

HISTORIC SHIPS

I. PROPOSED DESIGNATIONS: Existing sites that should continue in historic ship use and new expansion sites (solid brown)

Existing sites: Hyde Street Pier, Pier 45 (Pompanito), Piers 3 and 5 (Santa Rosa and Klamath)

New sites: None

II. TENTATIVE DESIGNATIONS: Pending further review (hatched brown)

None (The National Park Service is not currently recommending a move of the existing facility to Pier 46B. If such a recommendation should occur then use of this site for a historic ship museum could be studied in Phase Two.)

III. EXISTING SITES THAT SHOULD NOT CONTINUE IN CURRENT USE IN THE LONG-TERM

None

IV. AREAS OUTSIDE OF PORT JURISDICTION THAT COULD BE DESIGNATED

None

IDENTIFIED USES THAT DO NOT HAVE SPECIFIC SITE DESIGNATIONS BUT WHICH NEED TO BE ACCOMMODATED:

- Temporary and Ceremonial Berthing for commercial and industrial vessels (including layover and overflow berthing for the cruise and fishing industries)
- Temporary Mooring for recreational vessels
- Access for swimming and other Recreational Water Users

PRELIMINAR

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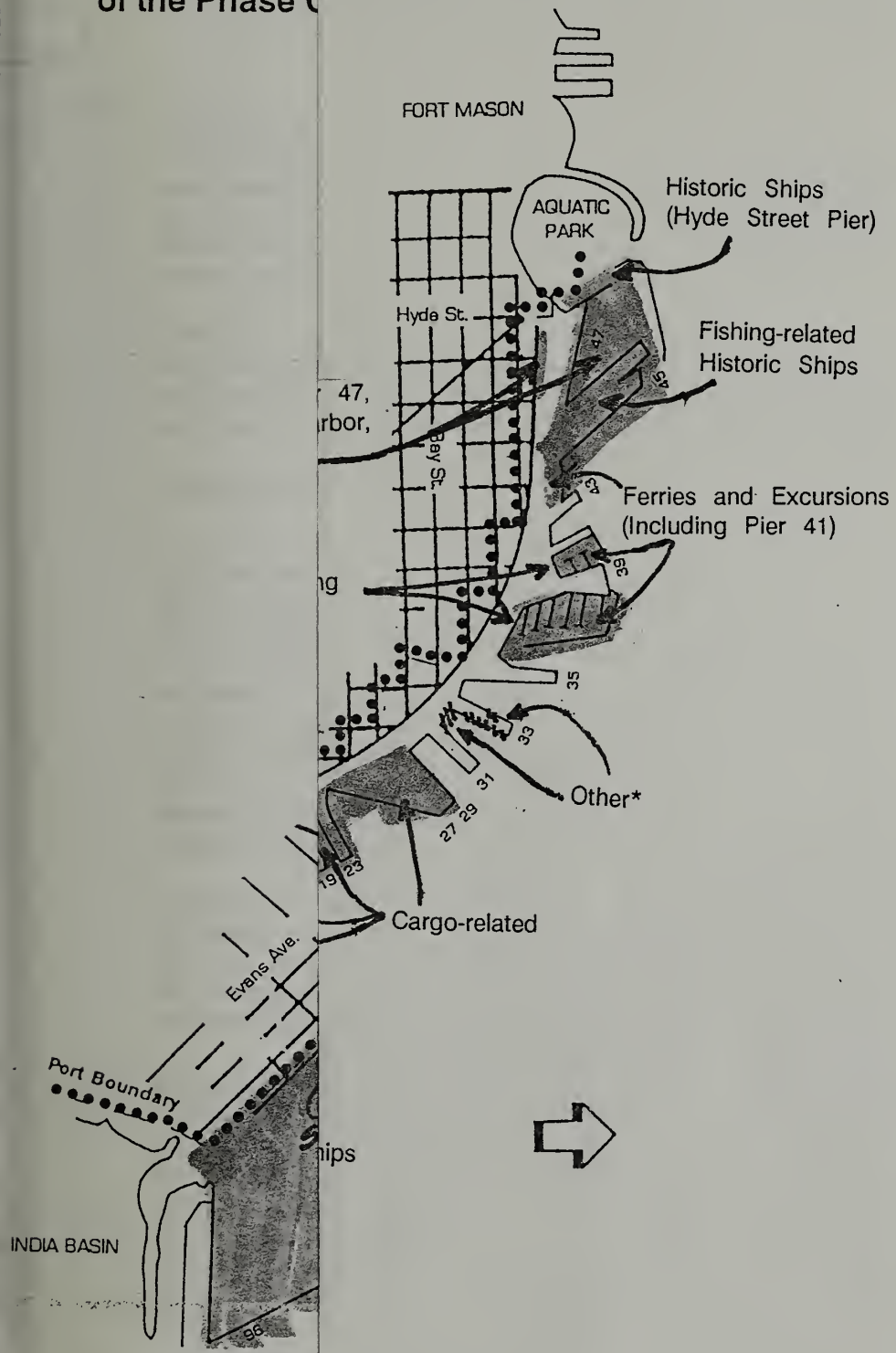


ified as a potential site for a
ver other uses identified during Phase Two
aching any land use conclusions. Refer to
" document for more detail on the potential
vity identified for this site.

PRELIMINARY

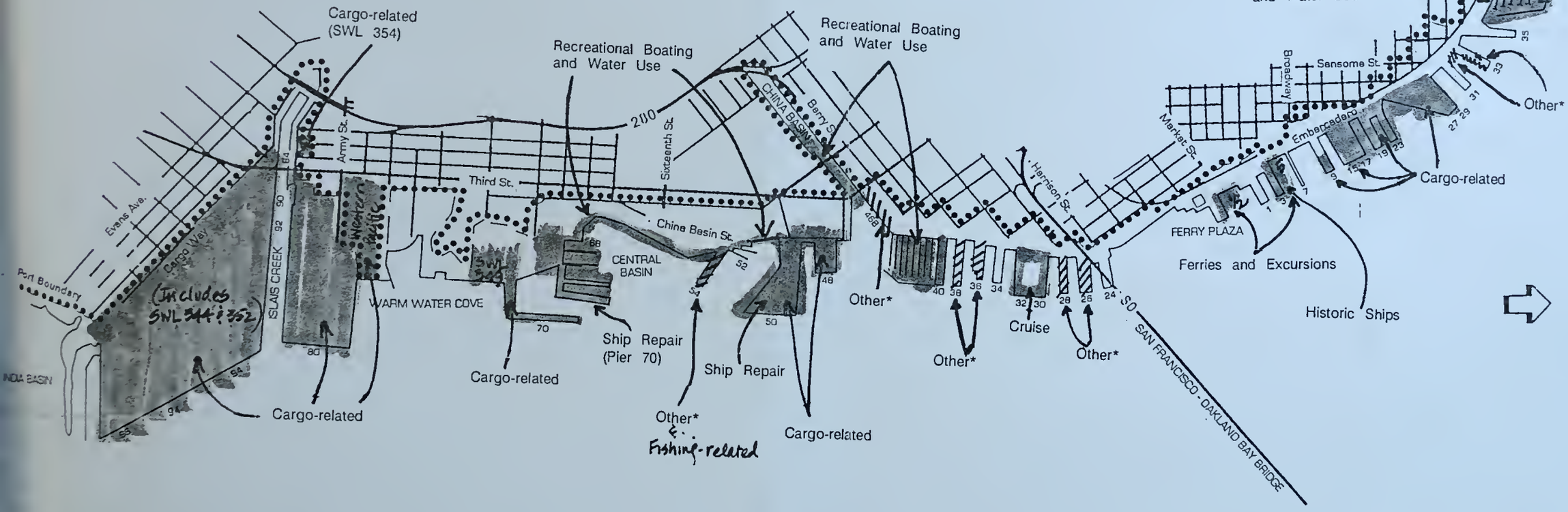
PRELIMINARY - SUBJECT TO PUBLIC REVIEW AND REVISION

PORT OF SAN FRANCISCO
Waterfront Plan - Phase One (Water-dependent Activities Map)
Preliminary Draft: August 4, 1992

(NOTE: Please refer to "Key to Map" document for a detailed explanation of the Phase One mapping approach and designations.)

Preliminary indication of areas suited for continued or expanded use in the long- term for water-dependent activities

Preliminary indication of areas that may accommodate water-dependent activities, but which also will be considered for other uses in Phase Two of the Waterfront Plan process



This has tentatively been identified as a potential site for a water-dependent activity, however other uses identified during Phase Two should be considered before reaching any land use conclusions. Refer to the accompanying "Key to Map" document for more detail on the potential type(s) of water-dependent activity identified for this site.

PRELIMINARY - SUBJECT TO PUBLIC REVIEW AND REVISION

PORT OF SAN FRANCISCO - WATERFRONT PLAN ADVISORY BOARD
WATERFRONT PLAN - PHASE ONE
PRELIMINARY RECOMMENDATIONS FOR WATER-DEPENDENT ACTIVITIES
KEY TO MAP

DRAFT: August 1992
REVISED: October 21, 1992

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The recommended Phase One designations on the attached map are intended to accommodate the land-related needs of water dependent industries, as identified during the recently completed Phase One planning sessions. These preliminary land designations indicated on the attached map and described in this map key have been the subject of two months of review and discussion by the public and the Waterfront Plan Advisory Board, following several months of analyzing each water-dependent industry.

The land designations do not describe precise areas at this time; they are intended to show the general areas to accommodate water-dependent activities. The statements below and the charts that follow, which accompany the map, provide a definition of each type of use category and designation, and a listing of the specific sites affected.

PRIMARY USES

The water-dependent activities studied during Phase One have been grouped into seven "primary use" categories shown in the Phase One map: Cargo-related, Fishing-related, Recreational Boating and Water Use, Ferry and Excursion Boats, Ship Repair, Cruise, and Historic Ships. The primary use categories are described in detail below; each includes the identified primary use, as well as support services and ancillary functions which are necessary for the operation of the primary use. For example, the cargo-related category includes in addition to primary cargo facilities, support functions such as cargo sourcing areas, equipment storage, warehousing , employee parking, etc. which all are critical to continuing cargo operations at the Port. The designations shown on the map therefore indicate that either the primary use or associated support services would be appropriate on the affected sites.

It should be noted that the designated sites on the map do not necessarily accommodate the needs of all the support services that were identified during the Phase One planning process. As part of the subsequent planning phases, we intend to identify opportunities for shared uses, which could accommodate some of the remaining demand for support services (especially parking).

Cargo-related

Consists of all primary, support and ancillary operations necessary to serve the cargo shipping industry, for example: shipping terminals and vessel berthing and tie-up facilities at adjacent waterside areas, warehouses, equipment storage, cargo sourcing, container freight stations, administrative functions, employee parking, ship servicing, bar pilots, ship chandlers, environmental services and Port maintenance activities. This category also includes an assumption that any necessary truck and rail access to the designated sites through other Port property not included in the shaded designation is provided.

Fishing-related

Consists of all primary, support and ancillary operations necessary to serve the fishing industry and fishing related activities, for example: commercial and sport fishing harbor and berthing area, fish processing and distribution, and support services such as chandlers, parking, administrative functions, fuel docks and Port maintenance activities.

Recreational Boating and Water Use
Consists of all primary, support and ancillary operations necessary to serve recreational boating, swimming and water users, for example: small boat marinas, public and private motorized and non-motorized boat launching, small boat repair, dry storage, services such as fuel docks, and related support activities such as visitor parking, administrative offices, convenience stores, storage and public facilities (restrooms, lockers, etc.).

Ferry and Excursion Boats
Consists of all primary, support and ancillary operations necessary to serve commuter ferry and excursion boat operations, for example: passenger service and boarding areas, and berthing and tie-up facilities at adjacent waterside areas, and auxilliary support facilities such as administrative space, storage, parking, and public facilities.

Ship Repair
Consists of all primary, support and ancillary operations necessary to serve the ship repair industry, for example: drydock and berthing facilities, medium sized boat repari operations, storage area, employee parking, warehousing and workshop areas, berthing space for topside work and administrative office space.

Cruise
Consists of all primary support and ancillary operations necessary to serve the cruise industry, for example: a cruise terminal facility and berthing at adjacent waterside areas, and ancillary uses such as visitor pakring, passenger services, restaurants, public facilities, ship servicing, and bus and taxi staging areas.

Historic Ships
Consists of all primary, support and ancillary operations necessary to serve historic ships, for example: berthing areas, museum area, parking, storage and workshop space, public facilities and maintenance shop facilities.

[NOTE: Areas for temporary berthing and mooring needs have not been specifically addressed in these designations. It is not anticipated that specific sites will be designated for these uses, but that policies will be established at the end of Phase Two, for developing certain sites in a way that will allow for accommodation of these uses. The Phase Two planning process may also identify additional opportunities for accommodating access for recreational swimming.]

TYPE OF DESIGNATION

A solid shading on the map means that the proposed designation is either 1) a water-dependent use or related support service that currently exists on the site and should continue in the long-term; or 2) a new expansion area that responds to landneeds identified in the Phase One planning process. Some of these areas have already been established as potential sites for expansion through an official policy action taken by the Port Commission.

A hatched area indicates a tentative designation that should be reviewed further during the Phase Two planning process. Sites have been given a tentative designation either because 1) although the site is currently used for a certain function, it may not represent the most appropriate long-term use of the site, or 2) the site may be an appropriate location for a water-dependent activity studied in Phase One, however alternative uses for the site should be considered during the Phase Two process in order to determine if the tentative designation represents the "highest and best" use for that site.

Areas that are not shaded or hatched indicate these sites are open for considering any uses identified during the Phase Two planning process.

While most of the land inside the mapped Port jurisdiction line is under the control of the Port of San Francisco, there are some areas that are privately held or owned by other public agencies. This primarily affects the India Basin and Warm Water Cove areas. In addition, there are areas that do not fall inside the Port jurisdiction line, but which are contiguous with the Port of San Francisco waterfront. Those areas are Hunters Point Shipyard and Aquatic Park. Given the location of these sites in relation to Port of San Francisco property, it is worthy to address them in the Waterfront Plan. For planning purposes, this Phase One map and attached charts identify the type of water-dependent use that is recommended by the Waterfront Plan Advisory Board, as an advisory measure.

SITE DESIGNATIONS, BY TYPE OF WATER-DEPENDENT USE CATEGORY

CARGO-RELATED ACTIVITIES

I. Recommended Designations: Existing sites that should continue in cargo-related use, plus new expansion sites

Existing sites: Piers 15-17, 19-23, 27-29, 48, 80, 90, 92, 94, 96, eastern portion of Pier 9, northern portion of Pier 50, southern portion of Pier 70, SWL 337 (adjacent to Piers 48 & 50), eastern portion of SWL 349 (adjacent to Pier 70), portion of SWL 344 (adjacent to Piers 90 & 92), and portion of SWL 352 (adjacent to Pier 94).

New sites: 100 acre reserve adjacent to Piers 80, 94, 96 (including Western Pacific property, portions of SWL 344 and 352), southern portion of Pier 50 (if ship repair should no longer need the site), SWL 354 along Islais Creek (unless traded for the "Burns" property).

II. Tentative Designations: Sites that merit further review.

Piers 26, 28, 31, 36, 38, 46B, 54, western half of Pier 9, western portion of SWL 349
(These sites could help to meet the needs identified during Phase One for support servics for cargo-related industires, including port maintenance operations currently located on Pier 46B. Whether cargo-related activities represent the "highest and best" use of the site should be evaluated during Phase Two.)

III. Existing Sites that Should not Continue in Current Use in the Long-term: None

IV. Areas Outside of Port Jurisdiction that Could Accommodate Cargo-related Activities:

Hunters Point Shipyard, Warm Water Cove, "Burns" property, privately- and city-owned parcels between Piers 70 and 80 (as per BCDC/MTC Seaport Plan).

FISHING-RELATED ACTIVITIES

I. Recommended Designations: Existing sites that should continue in fishing-related use and new expansion sites.

Existing sites: Piers 45, 47, Hyde Street Harbor, Fish Alley, Wharf J7, Pier 54 (seasonal use for herring fishing)

New sites: None

II. Tentative Designations: Sites that merit further review.

Portion of Pier 33

III. Existing Sites that Should not Continue in Current Use in the Long-term:

Pier 28 (site is in temporary use as a fish handling area until completion of the Pier 45 project).

IV. Areas Outside of Port Jurisdiction that Could Accommodate Fishing-related Activities: None

RECREATIONAL BOATING AND WATER USE

I. Recommended Designations: Existing sites that should continue in recreational boating, swimming and water use, and new expansion sites.

Existing sites: Waterside of China Basin Street south of Pier 50 to Mariposa Street (except Pier 54), including SWL 345 ("The Ramp"), South Beach Harbor, portion of Pier 40, Pier 39 marina, Mission Creek, portion of Aquatic Park (within Port jurisdiction).

New sites: Waterside portion of Pier 68

II. Tentative Designations: Sites that merit further review.

Islais Creek, portion of Pier 40 (It is anticipated that policies will be established as part of Phase Two for developing certain sites that would accommodate additional areas for recreational swimmers and other recreational water users.)

III. Existing Sites that Should Not Continue in Current Use in the Long-term: None

IV. Areas Outside of Port Jurisdiction that Could Accommodate Recreational Boating and Water Uses:

- India Basin, Presidio, Aquatic Park

FERRY AND EXCURSION BOATS

I. Recommended Designations: Existing sites that should continue in ferry and excursion boat use, and new expansion sites.

Existing site: Piers 1/2, 39, 41, 43-1/2, Ferry Plaza

New sites: Piers 3 and 5

II. Tentative Designations: Sites that merit further review.

Pier 31-1/2 (Currently in use as an excursion boat area, however this site may not be ideally suited for this use; designation of Piers 3 and 5 may provide an opportunity to replace the use on Pier 31-1/2.)

III. Existing Sites that Should Not Continue in Current use in the Long-term: None

IV. Areas Outside of Port Jursidiction that Could Accommodate Ferry and Excursion Boat Use: None

SHIP REPAIR

I. Recommended Designations: Existing sites that should continue in current use and new expansion sites.

Existing sites: Pier 70, southern portion of Pier 50 (Note: Pier 50 would be designated for cargo-related use if it ceases to be used for ship repair.

New sites: None

II. Tentative Designations: Sites that merit further review.

Pier 38 (Currently in occasional use as a ship repair facility by some of the smaller ship repair companies. It may be possible to accommodate this occasional use in a shared facility in a different location.)

III. Existing Sites the Should not Continue in Current Use in the Long-term:

Upland portion of Pier 70 (This portion of Pier 70 has not been in active use as a ship repair facility.)

IV. Areas Outside of Port Jurisdiction that Could Accommodate Ship Repair:

Hunters Point Shipyard, India Basin (for medium sized boats)

CRUISE

I. Recommended Designations: Existing sites that should continue in cruise-related use, and new expansion sites.

Existing sites: None

New sites: None

II. Tentative Designations: Sites that merit further review.

Piers 35, and 30-32

III. Existing Sites that Should not Continue in Current Use in the Long-term: None

IV. Areas Outside of Port Jurisdiction that Could Accommodate Cruise-related Use: None

HISTORIC SHIPS

I. Recommended Designations: Existing sites that should continue in historic ship use and new expansion sites.

Existing sites: Hyde Street Pier, Pier 45 (Pompanito), Piers 3 and 5 (Santa Rosa and Klamath).

New sites: None

II. Tentative Designations: Sites that merit further review.

None (The National Park Service is currently studying alternative expansion sites for the Historic Ship Museum located at the Hyde Street Pier. If this study results in recommendations that affect other Port property, that site(s) will be evaluated in Phase Two.)

III. Existing Sites that Should not Continue in Current Use in the Long-term: None

IV. Areas Outside of Port Jurisdiction that Could Accommodate Historic Ship Use: None

ADDITIONAL BERTHING AREAS

The following areas are recommended to accommodate the long-term berthing needs of vessels associated with ongoing operation of any of the water-dependent activities analyzed in Phase One of the Waterfront Plan process. These areas are in addition to the waterside berthing facilities associated with the site designations itemized in each of the water-dependent primary use categories described above. These recommendations for additional berthing areas apply only to the waterside areas adjacent to Piers noted; the Piers themselves may be considered for other uses (including non-maritime use) in subsequent phases of the planning process: Piers 1, 9 46B

IDENTIFIED USES THAT DO NOT HAVE SPECIFIC SITE DESIGNATIONS BUT WHICH NEED TO BE ACCOMMODATED:

- o Temporary and Ceremonial Berthing for commercial and industrial vessels
- o Tempoary mooring for recreational vessels
- o Additional access for recreational water users

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PRELIMINARY RECOM

PORT OF SAN FRANCI
WATERFRONT PLAN A
Waterfront Plan - Phase
Revised: October 21, 1

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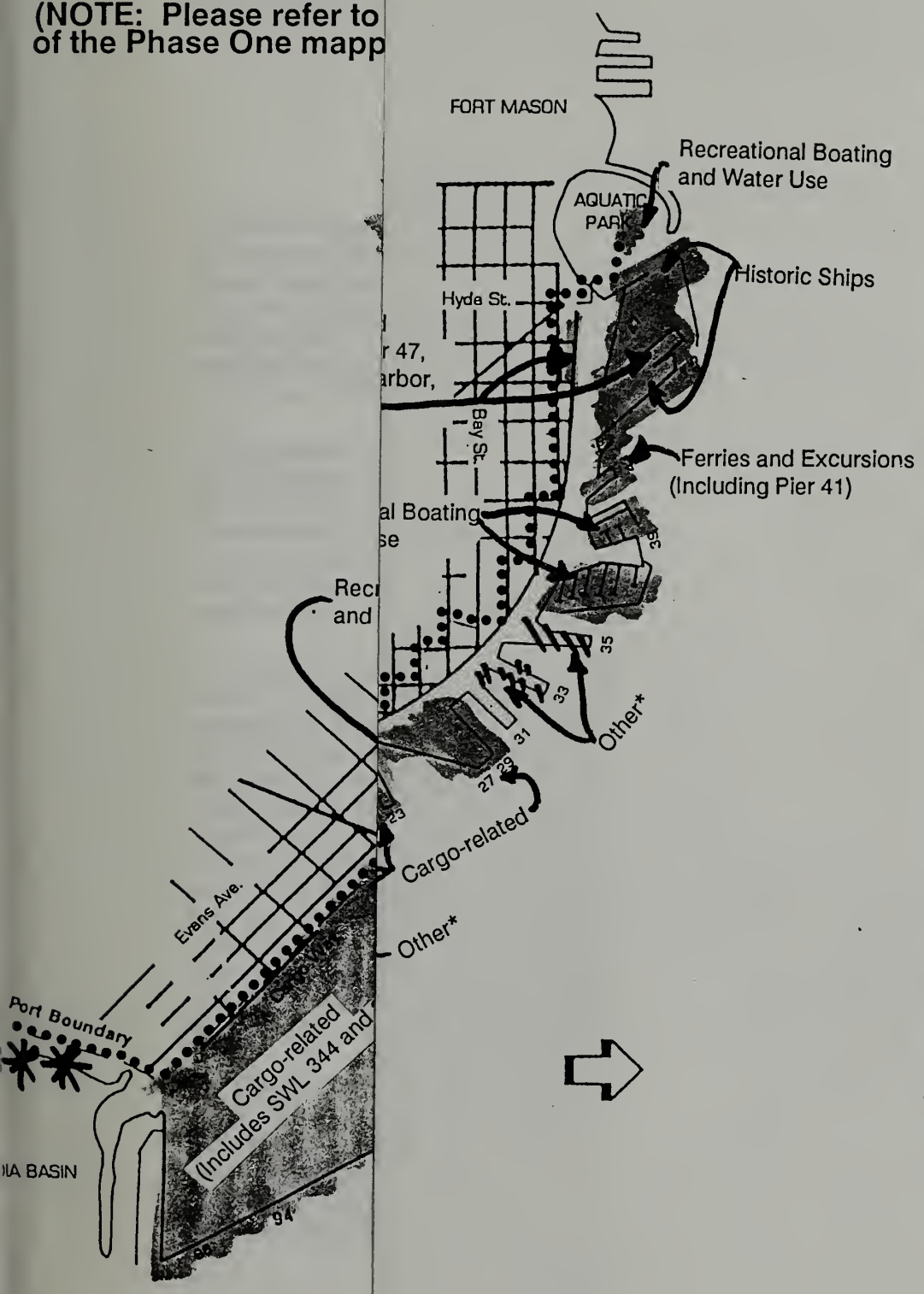


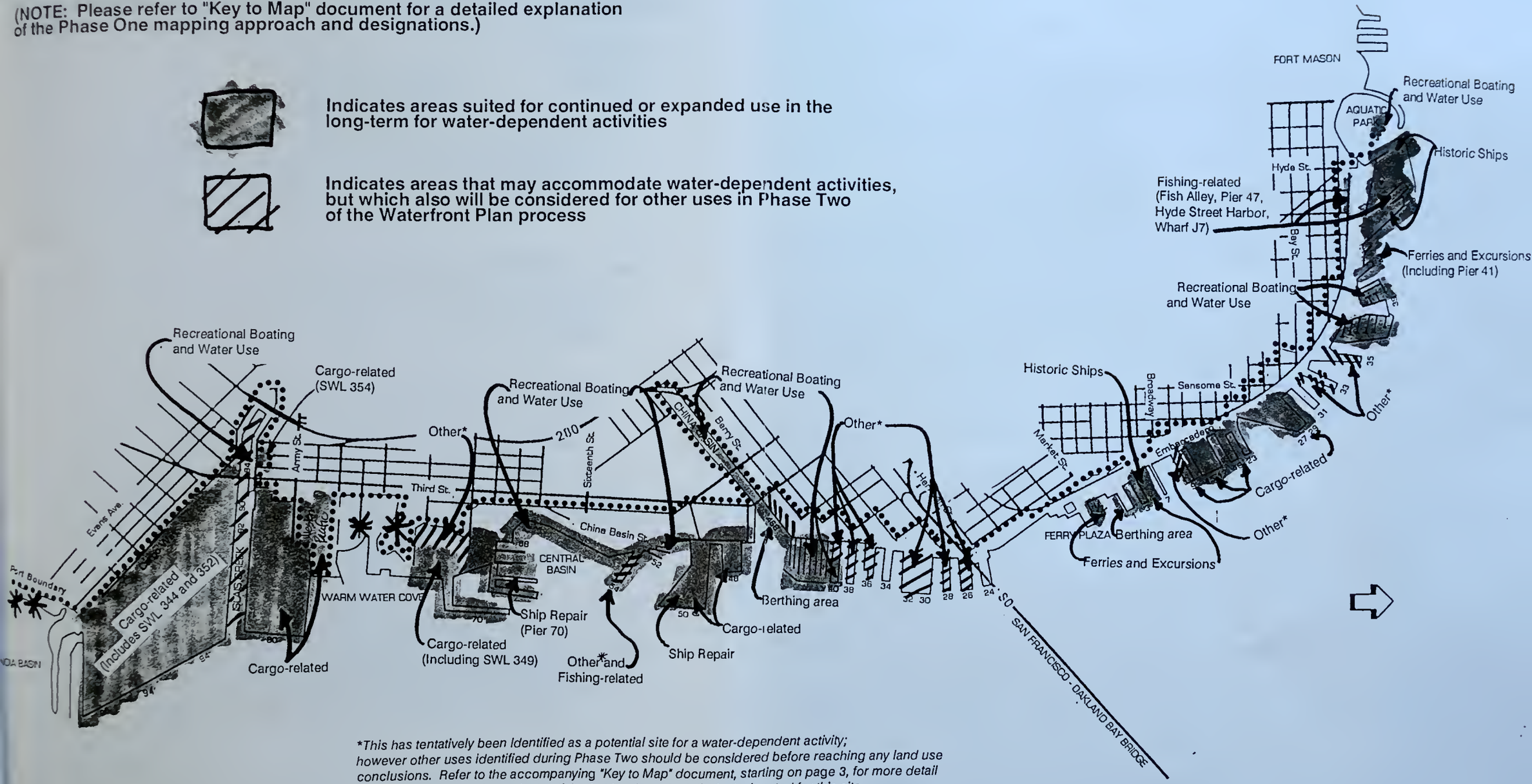
PRELIMINARY RECOMMENDATIONS

PORT OF SAN FRANCISCO
WATERFRONT PLAN ADVISORY BOARD
Waterfront Plan - Phase One (Water-dependent Activities Map)
Revised: October 21, 1992

(NOTE: Please refer to "Key to Map" document for a detailed explanation of the Phase One mapping approach and designations.)

Indicates areas suited for continued or expanded use in the long-term for water-dependent activities

Indicates areas that may accommodate water-dependent activities, but which also will be considered for other uses in Phase Two of the Waterfront Plan process



*This has tentatively been identified as a potential site for a water-dependent activity; however other uses identified during Phase Two should be considered before reaching any land use conclusions. Refer to the accompanying "Key to Map" document, starting on page 3, for more detail on the type of water-dependent activity that has been tentatively designated for this site.

**These land use designations are advisory only. The sites affected by the advisory designations are not currently under the control of the Port of San Francisco. Refer to the accompanying "Key to Map" document, starting on page 3, for more detail on the type of water-dependent activity that has been advised for this site.

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PORT OF SAN FRANCISCO
WATERFRONT PLAN

The Port of San Francisco currently is engaged in a long-range planning process to develop a land use plan for the 7.5 mile stretch of waterfront property under its control, from Fisherman's Wharf to India Basin. The creation of a Waterfront Plan is an important step in implementing the Port's strategic mission, that of "creating a balanced and diverse waterfront". It also is required pursuant to the passage by San Franciscans of Proposition H in November 1990.

The success of this planning effort relies on maximum feasible public participation. Development of the Waterfront Plan is being conducted under the direction and review of the Waterfront Plan Advisory Board to the Port Commission. This 27-member body, appointed by the Mayor, the Board of Supervisors and the Port Commission, is made up of the diverse interests of maritime, labor and industry representatives, and neighborhood and citywide organizations. The Advisory Board members are listed on the reverse.

The approach to developing the Waterfront Plan is broken into three main phases. In light of provisions contained in Proposition H, the first phase has focussed on how much Port land should be reserved for water-dependent (maritime) activities. Once those sites are identified, Phase Two will address the range of non-water-dependent uses that should be considered for the remaining Port property, including public recreation and open space. Overlaying the land use analyses in both phases of the planning process will be an identification of the opportunities for incorporating public access into waterfront development. The third and final phase will involve reconciling the land use recommendations produced in the first two phases to produce a balanced Waterfront Plan that also is financially feasible and implementable. The Waterfront Plan will thus be comprehensive in scope, taking into account traditional land use planning concerns as well as the Port's economic development objectives and capital requirements.

The Waterfront Plan Advisory Board holds public meetings twice a month. Your participation in developing the Waterfront Plan is welcome and actively invited. If you have any questions and/or would like to receive meeting agenda and other materials produced during the planning process, please call the Waterfront Plan hotline at 274-0354 and leave a message and phone number. A Port staff member will be in touch with you to discuss your concerns.

Waterfront Plan Advisory Board Members

ROBERT TUFTS (Advisory Board Chair), Attorney, Jackson, Tufts, Cole & Black
SUE BIERMAN, Former President, San Francisco City Planning Commission
KERMIT BOSTON, Senior Associate, BKB Associates
ANNE MARIE CERVANTES, Architect, Hardison, Komatsu, Ivelish and Turner
DENISE CONLEY, Principal, Keyser Marston Associates, Inc.
JAMES C. ESCHEN, Former President, California Stevedore and Ballast Company (retired)
PATRICK J. FLANAGAN, President, Standard Fisheries Corporation
MICHAEL GALLETTE, Executive Director, Fisherman's Wharf Tenants Association
LESTER GEE, Architect, Brown, Raymond, Boulton & Szabo
D. CARL HANSON, Manager, Southwest Marine, Inc. Ship Repair
DENNIS HERRERA, Maritime Attorney, Kelly, Cox, Wootton, Welch, Gill & Sherburne
TOBY LEVINE, Member, San Francisco City Planning Commission
DENISE HINCKLE McCARTHY, Executive Director, Telegraph Hill Neighborhood Center
BRIAN T. McWILLIAMS, Vice President, ILWU
RICHARD C. MILLET, Architect
GEORGE MIX, JR., Director, Bay Area Urban League, San Francisco Office
STAN MOY, Architect, Finger & Moy Architects
PETER MOYLAN, Office Manager, DASSE Design, Inc.
NAN G. ROTH, Planner
JACK SCOTT, Owner, Jack Scott & Associates Construction Company
MARINA V. SECCHITANO, Regional Director, Inland Boatmen' Union of the Pacific
JULIA VIERA, Executive Director, Friends of Islais Creek
JAY S. WALLACE, Litigation Attorney, O'Donnell & Pia
ESTHER "b" WOESTE, Independent Insurance Broker

Past Members:
JACK MORRISON, San Francisco Tommorow
CURT A. RODBY, Vice President, Nedlloyd Lines
EMILY G. RODRIGUEZ, Director of Transportation, Esprit de Corps

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PORT OF SAN FRANCISCO

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PORT OF SAN FRANCISCO
WATERFRONT PLAN

The Port of San Francisco currently is in the process of developing a land use plan for the 7.5 mile stretch of waterfront property under its control, from Fisherman's Wharf to India Basin. The creation of a Waterfront Plan is called for by the citizen initiative, Proposition H, approved by San Franciscans in November 1990; the Waterfront Plan also will fulfill an objective of the Port's strategic mission, which is to "create a balanced and diverse waterfront".

The success of this planning effort relies on maximum feasible public participation. Development of the Waterfront Plan is being conducted under the direction and review of the Waterfront Plan Advisory Board to the Port Commission. This 27-member body, appointed by the Mayor, the Board of Supervisors and the Port Commission, is made up of the diverse interests of maritime, labor and industry representatives, and neighborhood and citywide organizations. The Advisory Board members are listed on the reverse.

The approach to developing the Waterfront Plan is broken into three main parts. The Advisory Board is just finishing the first part (Phase One) now, which will identify how much Port land should be reserved for water-dependent (maritime) activities. Giving first priority to maritime activities is one of the directives contained in Proposition H. Once those maritime sites are identified, the next part (Phase Two) will address the range of non-maritime uses that should be considered for development on Port property, including public recreation and open space, and public access opportunities in new development.

The last part (Phase Three) will reconcile the land use recommendations produced in Phases One and Two, in order to produce a balanced Waterfront Plan that also is financially feasible and implementable. The Waterfront Plan will thus be comprehensive in scope, taking into account traditional land use planning concerns as well as the Port's economic development objectives and capital requirements.

The Waterfront Plan Advisory Board holds public meetings twice a month, and have been meeting for over a year. In the course of that period, the Advisory Board members have become fully educated on all aspects of the Port. **The Advisory Board and staff at the Port actively invite your participation in developing the Waterfront Plan. If you have any questions and/or would like to receive materials produced during the planning process or schedule an informational presentation regarding the Waterfront Plan, please call the Waterfront Plan hotline at 274-0354 and leave a message and phone number. A Port staff member will be in touch with you to discuss your concerns.**

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PORT OF SAN FRANCISCO WATERFRONT PLAN ADVISORY BOARD
WATERFRONT PLAN, PHASE TWO
"VISION STATEMENTS"
(December 1992)

The Port of San Francisco currently is in the process of developing a land use plan for the 7.5 mile stretch of waterfront property under its control, from Fisherman's Wharf to India Basin. The creation of a Waterfront Plan is called for by the citizen initiative, Proposition H, approved by San Franciscans in November 1990; the Waterfront Plan also will fulfill an objective of the Port's strategic mission, which is to "create a balanced and diverse waterfront".

As part of the planning process, citizens are being asked to air their ideas and visions about what they would like to see along the waterfront. The suggestions received will in large part define the range of land uses that will be considered for inclusion in the Waterfront Plan.

So far, the Waterfront Plan Advisory Board, the appointed body charged with recommending a land use plan to the Port Commission, has received many responses. These "vision statements" are listed by topic in the attached pages. The matrix format allows an indication of other topical areas that are related to each vision statement. These ideas will be reviewed by the Waterfront Plan Advisory Board to begin identifying which vision statements describe general goals and high priority projects.

The comment period for receiving additional ideas is still open. Citizens are encouraged to share their visions for the waterfront with the Advisory Board. The Advisory Board holds public meetings twice a month. You are invited to describe your ideas during those sessions, or send them in writing to the Waterfront Plan Advisory Board, Port of San Francisco, Ferry Building, Suite 3100, San Francisco, 94111. If you have any questions regarding the Waterfront Plan project, call the Waterfront Plan hotline at (415) 274-0354).

PORT OF SAN FRANCISCO WATERFRONT PLAN ADVISORY BOARD
WATERFRONT PLAN, PHASE TWO – VISION STATEMENTS
Revised: December 1, 1992

G=General Goal	* = Priority	NT = Near-term LT = Long-term	VISION STATEMENT (Topical areas indicated to the right are related to the vision statement)	Open Space & Recreation	Public Access	Urban Design	Historic Preservation	Employment	Land Uses, Activities	Environmental Quality	Port Financial City Fiscal	Transportation
			OPEN SPACE AND RECREATION									
	*	NT	OS1. A park south of the Ferry Building.	X	X				X			
	*	NT	OS2. A beach and children's wading area south of the Ferry Building, easy public access.	X	X				X			
			OS3. More children-oriented play areas south of the Ferry Building.	X	X				X			
			OS4. A public swimming barge, between China Basin and Fisherman's Wharf, capacity 500–1000 people.	X	X				X			
			OS5. Enclosed water area at Mission Rock for public sailing and mooring of small boats, and temporary mooring for visiting sailors w/ landside parking, at reasonable rates, and public restrooms.	X	X				X			
			OS6. Open space development around Warm Water Cove.	X	X				X			
			OS7. Playland-at-the-Beach type of amusement park--possibly at Piers 30-32.	X	X			X	X		X	
			OS8. Bike rentals along the waterfront, for recreational activity and improved public access.	X	X	X			X			X
			OS9. One-way bicycle rental service along the waterfront for transportation and public access.	X	X	X			X			X
	*		OS10. Designate a bike and running trail along the waterfront, protected from traffic.	X	X	X						X
			OS11. Provide wetland habitat areas.	X	X					X		

PORT OF SAN FRANCISCO WATERFRONT PLAN ADVISORY BOARD
WATERFRONT PLAN, PHASE TWO - VISION STATEMENTS
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	*	NT	OS12.	Interpretive center for the natural area planned for Pier 98.	X	X				X	X		
G	*	NT & LT	OS13.	Open space design/amenities that meet the needs/interests of San Franciscans.	X	X	X						
			OS14.	Relocate the Vallancourt Fountain from Justin Herman Plaza to a new waterfront park.	X		X						
			PUBLIC ACCESS										
G	*	NT & LT	PA1.	Opportunities for people to view maritime activities.	X	X				X			
			PA2.	Observation towers for public viewing from a distance, for operations that cannot accommodate direct public access.	X	X				X			
			PA3.	An elevated public access walkway for public viewing of passenger ship activities.		X				X			
	*	NT	PA4.	Public access for small boat users from the water to landside activities.		X				X			
			PA5.	A sheltered pier for charter yacht pick-ups/drop offs of guests, open to independent charter operators, with shared parking arrangements.		X				X			
	*		PA8.	Enhance and highlight the regional Bay Trail public access along the waterfront.	X	X	X						
G	*		PA7.	Improve pedestrian access with easy crossing over to the waterfront edge.		X	X						
	*	NT & LT	PA8.	Public access that responds to the needs of senior citizens too.		X							

PORT OF SAN FRANCISCO WATERFRONT PLAN ADVISORY BOARD
WATERFRONT PLAN, PHASE TWO – VISION STATEMENTS

Revised: December 1, 1992

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	*	NT & LT	PA9. Improvements that attract San Franciscans to the waterfront.	X	X				X			
			PA10. Public access around Pier 45.		X							
			URBAN DESIGN									
G	*		UD1. Open architectural design that facilitates connections to the water and between activities.		X	X			X			
G	*		UD2. Minimize visual obstructions towards the waterfront, allow greater opportunities to view shipping and other waterside activities.	X		X			X			
G	*		UD3. Maintain and complement historic design features of existing waterfront structures.			X	X					
			UD4. Buffers between conflicting land uses activities.			X			X			
			UD5. Connections and transitions between public activities along the waterfront.			X			X			
			UD6. Visibility for businesses located on the waterfront.			X		X	X			
	*	LT	UD7. Renovation of the Ferry Building w/ a ~~"transparent" design~~ a visible and physical connection between the downtown and the water.			X	X					
			UD8. Reclaim the prominence of the Ferry Building creating a marriage of Market Street with the Embarcadero.									

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			UD9. Adaptive reuse of the finger piers for community-oriented activites (e.g. Fort Mason), toretain the historic character and image of San Francisco's waterfront.		X	X	X		X			
			UD10. Public art in new development and open spaces.	X		X			X			
			HISTORIC PRESERVATION									
	*	NT	HP1. Preserve Ferry Building as a regional transportation center/anchor (w/open design) to so it again operates as a gateway between the water and downtown.		X	X	X		X			X
			HP2. Preserve the architectural integrity of the Ferry Building and reflect its historic use and character in a grand plaza in front.	X	X	X	X		X			X
			HP3. Allow a large area for berthing a large historic ship/sailing vessel, which could accommodate a restaurant, conference center and other public-oriented activities.		X		X		X		X	
			EMPLOYMENT									
			E1. Support for increased break bulk shipping activities (and associated jobs) in the Northern Waterfront by opening up viewing areas for the public.		X	X		X	X		X	
			E2. A film center in the Bayview/Hunters Point area to generate jobs for local residents.					X	X		X	
			E3. Opportunities on Port property for incubator industries, especially related to maritime technology and industry.					X	X		X	

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			E4.	Opportunities on Port property for not-for-profit organizations.					X	X			
			E.5	Retail opportunities incorporated into waterfront development, to generate revenues w/o replicating tourist-oriented sales (e.g. environmental-oriented, rather than T-shirt shops).					X	X		X	
			E6.	An education and job training center on Port property.					X	X			
G	*		E7.	An education and training center for ship building on Port property. + and other maritime skills & trades.					X	X			
			LAND USES, ACTIVITIES, AND EVENTS										
			LU1.	Two floors of development in pier structures to make more efficient use of the volume of space provided.						X			
			LU2.	Shared uses to maximize public access and land use efficiencies (especially parking).									
			LU3.	A Sailing Center, to provide an Americas Cup-type of yachting facility.	X	X				X		X	
			LU4.	Hotel development, as part of a mix of activities that attract people to the waterfront.					X	X		X	
			LU5.	Define parameters in which hotels would be acceptable.		X	X		X	X		X	
			LU6.	Dock the Lurline #4 for hotel use, also provide for two floors of parking.						X		X	

PORT OF SAN FRANCISCO WATERFRONT PLAN ADVISORY BOARD
WATERFRONT PLAN, PHASE TWO - VISION STATEMENTS
Revised: December 1, 1992

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			LU7.	Allow the Queen Mary to come to San Francisco as a hotel and public waterfront attraction.	X	X		X	X	X		X	
			LU8.	Up to three waterfront hotels.					X	X		X	
			LU9.	Ensure waterfront activities are compatible with land uses in adjacent neighborhoods.			X			X	X		X
			LU10.	Water-oriented commercial uses that reflect the character of the adjacent local neighborhoods, and provide distinctive services and attractions for residents as well as visitors.			X		X	X		X	
			LU11.	"Real" businesses along the waterfront such as post office, shoe repair, maybe a fresh fish market in a converted bulkhead building.					X	X		X	
			LU12.	Demolish dilapidated piers.						X	X		
			LU13.	Public restrooms along the waterfront; could be combined with kiosks/snack sales/other services to the public.		X			X	X			
			LU14.	A train museum, reflecting rail history of the waterfront and City.	X			X		X			
			LU15.	Live-work space on the waterfront.						X			
			LU16.	Waterfront activities that are better oriented towards children's needs and interests.	X					X			
			LU17.	Activities that are oriented to the needs of senior citizens.		X				X			
			LU18.	Jail barges						X		X	

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			LU19.	A sports arena with a glass top as public access overlook feature, for sports events and conventions, possibly at China Basin.	X	X			X	X		X	
			LU20.	Reserve option to build a baseball stadium at Pier 46B (and adjacent properties).	X		X		X	X		X	
			LU21.	Housing on inland sites, with terraced design as developments extend towards the Bay.			X			X		X	
			LU22.	A Pacific Rim-World Trade Center, w/a passenger terminal and maritime-related businesses.					X	X		X	
			LU23.	An open air amphatheatre in the Aquatic Park area.	X	X				X			
			LU24.	A fresh fish market, w/a complete array of local and non-local fish and seafood.					X	X			
			LU25.	A fish canning business to serve recreational and sport fishing activities.					X	X			
			LU26.	Multi-purpose fishing institute, operated by a non-profit like Packard Foundation, for public exhibits, research/resource center for oceanic/atmospheric industries.	X	X			X	X	X		
			LU27.	Land for small boat repairs to serve the needs of the fishing industry.						X			
			LU28.	A visitor center in the Ferry Building, theme park style, including a museum or exhibit of San Francisco history.	X			X		X			
			LU29.	Reestablish the Ferry Building as a gateway center for regional and local transportation.				X		X			X

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			LU30.	Have the federal government take responsibility for restoring the Ferry Building to create a Pacific Basin Center for trade and diplomatic conferences.				X		X			
			LU31.	Space for "temporary" uses in the Ferry Building area for public markets, exhibits, festivals, performing arts activities and similar events.	X					X			
			LU32.	A day care center and children's play area in the Ferry Building area, that could also be used as a community center.						X			
			LU33.	In the long-term (aprox. 50 years), build a new seawall along ends of the finger piers in the Northern Waterfront to create new land area for a cruise terminal w/ efficient berthing area, open space, and other non-maritime development.	X	X	X		X	X	X	X	
			LU34.	Limit high intensity land uses along the waterfront to those that provide public enjoyment of the waterfront.	X	X	X			X			
			LU35.	A national small business and sport convention center at China Basin.	X				X	X		X	
			LU36.	A public market, designed to be accessible from the water.		X			X	X		X	
			LU37.	A wooden boat building center with lots of public access, and training and education regarding wooden boats.		X		X	X	X			
			LU38.	A parade ground and open outdoor performance area in the Hunters Point Shipyard.	X	X				X			
			LU39.	Develop uses in the immediate future to attract people to the waterfront now, rather than focussing only on long-term projects.						X			

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WATERFRONT PLAN, PHASE TWO - VISION STATEMENTS
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			LU40.	Increase activity on Pier 7 with retail and commercial services to visitors.	X	X			X	X		X	
			LU41.	A supermarket in the South Beach area.					X	X		X	
			LU42.	Use underutilized parking in the Alcoa Building garage.						X			
			LU43.	Convert a Pier bulkhead building into a library.				X		X			
			LU44.	Prohibit T-shirt and souvenier sales, and fast food restaurant chains on the waterfront.						X			
			LU45.	A film production center, providing sound stage studios, ancillary space for film production operations, parking and ample power source, 10-15,000 s.f., with 30-40 foot high clear span ceilings in warehouse-type structure.					X	X		X	
			LU46.	A film production center which has multi-purpose functions, ~~operations~~ including film festivals, exhibition activities.	X				X	X		X	
			LU47.	An IMAX theatre (large, 7 foot high screens) for commercial and educational film presentations.	X				X	X		X	
			LU48.	Commercial and public-oriented uses in the waterfront area north of the Bay Bridge, and industrial maritime operations in the southern waterfront.			X			X			
			LU49.	Maintain Pier 35 as a cruise terminal.						X			
			LU50.	Move the California Maritime Academy from Vallejo to San Francisco.				X		X			

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			LU51. A welcoming center for the Navy, which also could be tourist-oriented.	X					X			
			LU52. A seamen's center to provide services to visiting sailors from all over the world.						X			
			LU53. A multi-cultural center reflecting the diversity of San Francisco.						X			
			LU54. A 24 hour waterfront with variety of activities, to meet needs of more people and recognize changes in work schedules, including more lighting along the waterfront to increase security and attractiveness of the area during the evening.		X	X			X			
			LU55. A museum that documents San Francisco's fire fighting history, with exhibits of historic fire fighting equipment.	X	X		X		X			
			LU56. More ferry and excursion, and berthing facilities with access for independent operators.						X		X	
			TRANSPORTATION									
			T1. A transportation system using the Embarcadero as the trunkline arterial that facilitates the movement of goods and services associated with waterfront activities.			X			X			X
			T2. Continue train tracks from the 4th and Townsend train depot along the Embarcadero to provide rail service to Fisherman's Wharf.			X						X
			T3. Transportation facilities that allow people to connect with various activities on the waterfront.			X			X			X

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WATERFRONT PLAN, PHASE TWO - VISION STATEMENTS
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			T4.	Give priority to pedestrians over vehicles.		X	X						X
			T5.	A single transit service that does not require transfers, which runs the length of the waterfront continually, so that people have a reliable system that provides access to any point along the waterfront.		X							X
			T6.	A second transportation system along the Embarcadero, in addition to the E-line and F-line, that provides further transportation capacity and does not require transfers.		X	X						X
			T7.	Coordinate any jitney-type service on the waterfront to serve parking facilities, to maximize their use.						X			X
			T8.	Garages under the Bay Bridge, to establish a centralized parking area near the freeway, with good access to the downtown and Fisherman's Wharf via MUNI Metro and F-line transit service.						X	X		X
			T9.	Improved transit connections between the northern and southern waterfront.			X						X
			T10.	The Ferry Building as a gateway facility for regional and local transportation connections.				X		X	X		X
			T11.	Renovate the Ferry Building as a transportation hub, with a grand plaza in front (on Embarcadero frontage) to serve that transportation function for all modes (pedestrians, bicycles, water transport, streetcars, buses subways, cable cars).				X		X	X		X
			T12.	Separate pedestrian and through traffic movements in front of the Ferry Building.									X

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WATERFRONT PLAN, PHASE TWO – VISION STATEMENTS
Revised: December 1, 1992

G=General Goal	* = Priority	NT=Near-term LT=Long-term	VISION STATEMENT (Topical areas indicated to the right are related to the vision statement)		Open Space & Recreation	Public Access	Urban Design	Historic Preservation	Employment	Land Uses, Activities	Environmental Quality	Port Financial City Fiscal	Transportation
			T13.	Street cars should be routed to the end of Market Street at the Ferry Building and the Steuart Street loop should be reconsidered.			X						X
			T14.	Support Alternative 5A for the Embarcadero Roadway Replacement, that would permit direct pedestrian access to the Ferry Building and a grand plaza, while allowing separate traffic flow on a sub-grade roadway.									X
			T15.	Water taxi service along the waterfront, improves public recreation opportunity and public access.	X	X				X		X	X
			T16.	Parking for waterfront activities, located away from the water's edge to minimize impacts on public access opportunities.		X				X			X
			T17.	A parking program using signage and other information to identify the location of parking facilities.			X			X			
			T18.	Expand the definition of maritime use to include the pure function of transportation. The retention and enhancement of maritime use along the waterfront should be related to new advances in transportation.						X			X
			T19.	Transportation services that also respond to the needs of senior citizens.									X
			T20.	Reopen rail access under Fort Mason, to extend transit service from Fisherman's Wharf.									X

PORT OF SAN FRANCISCO WATERFRONT PLAN ADVISORY BOARD
WATERFRONT PLAN, PHASE TWO – VISION STATEMENTS

Revised: December 1, 1992

G = General Goal; * = Priority; NT = Near-term, LT = Long-term

VISION STATEMENT (Topical areas indicated to the right are related to the vision statement)	Open Space & Recreation	Public Access	Urban Design	Historic Preservation	Employment	Land Uses, Activities	Environmental Quality	Port Financial, City Fiscal	Transportation
ENVIRONMENTAL QUALITY									
EQ1. Environmental restoration projects on Port property should be translated into mitigation credits that could be used for other Port development activities.						X	X		
EQ2. Activities that improve the Bay environment.						X	X		
EQ3. Environmental improvements need to be translated in direct terms into what kind of enhancements will be provided for plant and animal habitats on land and in water.							X		
EQ4. Funding/operations for environmental restoration businesses that would restore the environment and generate jobs and revenue.					X	X	X	X	
PORT FINANCIAL CONCERNS/CITY FISCAL CONCERNS									
PF1. Revenue-generating uses that also enhance public use of the waterfront.	X	X				X		X	
PF2. Better waterside transportation access (such as water taxis), which provide greater public attractions in San Francisco and thus capture more tourist dollars that otherwise would be spent in Marin County.						X		X	X
PF3. Increase the percentage of rents, and other charges that are collected by the Port.								X	
PF4. Get developer-paid public amenities, rather than financing them through rent credits and lease concessions.						X		X	

G=General Goal	* = Priority	NT=Near-term LT=Long-term	VISION STATEMENT (Topical areas indicated to the right are related to the vision statement)	Open Space & Recreation	Public Access	Urban Design	Historic Preservation	Employment	Land Uses, Activities	Environmental Quality	Port Financial City Fiscal	Transportation
			OTHER IDEAS									
			O1. Seek ideas from children about what they would like to see on the waterfront.									
			O2. Review past development proposals for Port property to identify whether there were components of those proposals that would still be acceptable activities on the waterfront.									
			O3. Establish a Fisherman's Wharf Authority to oversee all planning and management of activities in Fisherman's Wharf, which would coordinate improvements, marketing, city services to provide a better, high quality urban experience to visitors.									
			O4. Have the Port transfer its real estate development staff to the Redevelopment Agency, to implement development projects on surplus Port land, pursuant to policy direction established by the Port Commission.									
			O5. Increase activities along the waterfront by coordinating with other activities at public attraction centers in the downtown area (e.g. Yerba Buena Center, Rincon Center, Embarcadero Center).									

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#3

PORT OF SAN FRANCISCO

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Writer

December 29, 1992

TO: Jane Hudson
San Francisco Public Library - Civic Center Main

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FROM: Diane Oshima (274-0553)

RE: Public Information Documents Related to the Waterfront Plan

Please accept my apologies for taking so long to send this material to you for your documents collection for the Port's Waterfront Plan. Despite my good intentions, only now have I gotten the chance to package this up for you.

I have enclosed a series of background "profile" reports on all the water-dependent industries that have been studied by the Waterfront Plan Advisory Board as part of the planning effort. As I recall, your documents collection only includes the summaries of each of the water-dependent industries evaluated. The profile reports are quite detailed, and represent the most comprehensive written account of industry information produced by the Port. I also have included another copy of the summary for each profile report, except for the two profile reports on Support Services; no summaries were ever prepared for those.

Also included is a slightly revised version of the Phase One land designations for water-dependent uses, dated October 21, 1992. This map incorporates refinements in the preliminary recommendations of what Port land should be used for maritime purposes, based on public review and comment on the earlier version, dated August 1992. You have the August 1992 version in your records, but I don't believe you have the more recent release.

Since October, the Advisory Board members have held a series of sessions to invite input from the public regarding desirable uses of the waterfront. I have included for your information the most recent list of ideas. Although you are certainly welcome to incorporate this into the Waterfront Plan records, this list of "vision statements" is an ever-evolving document and thus is likely to undergo further rounds of change.

I hope you continue to receive our meeting notices and agenda as part of our regular mailing process. That is the best way to monitor the activities of the Waterfront Plan Advisory Board, just in case I overlook something (or, more likely, am late in sending our technical reports to you. Again, my apologies in the delay.

Hope your holidays were/are happy!

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PORT OF SAN FRANCISCO
SAN FRANCISCO PORT COMMISSION
WATERFRONT PLAN ADVISORY BOARD

STATEMENT OF FACTS AND ISSUES AS TO THE LAND USE REQUIREMENTS OF BREAK-BULK AND BULK SHIPPING

(Revised 6/2/92)

The following material provides a brief statement of the facts and issues relating to the land use requirements of the Break-Bulk and Bulk Shipping Industry, and related support services, as identified in the profile report and in workshops with industry representatives.

I. FACTS AND ISSUES RELATED TO THE ADEQUACY OF CURRENT LAND AND FACILITIES TO MEET FUTURE INDUSTRY NEEDS

- The 1988 BCDC/MTC Seaport Plan projections for break-bulk and bulk cargo volumes, in general, show flat or slow growth over the next twenty years. In addition, the Seaport Plan concluded that there is an oversupply of facilities to accommodate these types of cargo at Bay Area ports.

- General break-bulk is primarily handled at Pier 80 along with the container cargo. The facility is in good condition, and the industry representatives reported that break-bulk cargo handling is not incompatible with container handling for the foreseeable future. Pier 80 has sufficient capacity for future general break-bulk cargo.

- Growth in break-bulk shipping of coffee could be somewhat higher than the forecast indicated because, subsequent to the BCDC/MTC forecast, San Francisco was designated as the third port of entry and distribution for coffee futures. New York, which shares this designation, operates a large break-bulk terminal for coffee. Existing break-bulk terminal space, particularly at Pier 80, are underutilized and could potentially accommodate any increase in break-bulk coffee (or cocoa) imports. There are also several piers along the southern waterfront that could serve as both a break-bulk terminal and warehouse for coffee imports, including Piers 38, 48, and 50.

- Notwithstanding the slow growth forecast for break-bulk commodities, the Port could increase its regional share of neo-bulk commodities through competition with other Bay Area ports. Some industry representatives suggested that the Port might attract additional auto imports and exports by expanding the existing facility at Pier 70. An additional 18 acres of land adjacent to the facility is currently used for towed cars. In addition, the Hunter's Point Naval Shipyard was discussed as a possible location for an auto terminal because that type of terminal requires minimal land side capital improvements. Other industry representatives did not think that San Francisco could compete with ports such as Benecia and Richmond which offer large land area, and have long term contracts. The consensus was that container terminals generate more revenue than do auto terminals, and thus auto terminal use should not be considered on the 100 acres reserved for container terminal development in the vicinity of Piers 80, 94 and 96.

- Industry representatives also indicated that the Port should examine the feasibility of developing dry bulk facilities. Vancouver is investing $150 million in new facilities even though, like San Francisco, it is not close to the source of dry bulk exports. However, the high capital investment cost, low value of the commodity and need for large land area were cited as reasons that the Port should not allocate scarce land resources to this use.

- Newsprint, the Port's other significant neo-bulk commodity, has consolidated its operations at Piers 27-29. This is the only break-bulk use located on a finger pier. Industry representatives did not identify a need for additional terminal space, however, support service representatives indicated a need for additional space to store newsprint off- terminal. One company recently secured a 40,000 square foot warehouse in Oakland for this purpose, but would have preferred a San Francisco location. Although Piers 27-29 are rated in "good" condition, the principal operational issues are the need for dredging and difficult truck access. Trucks currently pick up the newsprint at off-peak hours to avoid traffic congestion.

- Piers 70, 90 and 92, the locations for automobiles, grain and liquid and dry bulk respectively, are in generally poor condition. Because these locations are also suitable for container cargo activities over the long term, a careful evaluation must precede any capital improvements to these facilities for the existing purpose.

II. IMPLICATIONS OF REGULATORY AND ENVIRONMENTAL ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The regulatory and environmental issues with the greatest potential impact on the bulk and break-bulk shipping industry's demand for additional Port land are (1) resolution of the dredge disposal problem in a financially feasible manner (although dredging requirements for break-bulk are lower than container shipping) and (2) enactment of land use policy and zoning regulations of City and Regional agencies to ensure preservation of industrial land, or provision of new industrial land at the Naval Shipyard, for cargo related support service uses (such as warehousing and trucking activities).

III. IMPLICATIONS OF FINANCIAL AND ECONOMIC ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- Whether the Port should maintain the current allocations of land for break-bulk and bulk cargo requires an analysis of the cost and revenue factors at a given location, and the lost opportunity costs of not substituting alternative higher value uses. Whether additional land should be allocated for break-bulk and bulk uses, particularly coffee imports and/or an expanded auto terminal operation, depend upon the economic feasibility of specific proposals.

- Over the long term rising maintenance and dredging costs will make it difficult for these uses to compete with container cargo uses for land that can be used for either purpose. Currently, break-bulk and bulk activities generate $2 million per year in revenue to the Port, while container shipping activities generate $8 million annually.

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PORT OF SAN FRANCISCO

BULK AND BREAKBULK CARGO SHIPPING AND HANDLING

I. INTRODUCTION

This profile of Bulk and Break-bulk Cargo Shipping and Handling at the Port of San Francisco includes the following components:

. General market trends for bulk and break-bulk cargo are presented, including a discussion of the factors that may affect those trends, and the implications for the Port of San Francisco.

. Regulatory issues and environmental implications associated with future bulk and break-bulk shipping and handling operations are identified, such as the regulation of dredging and disposal of dredged material, and opportunities for improving public access. Environmental issues, and the process for review and analysis of those issues, will be addressed.

. Financial and economic issues are discussed to the extent pertinent to Port of San Francisco decision making.

. Existing bulk and break-bulk facilities are described, and the suitability and sufficiency of those facilities to support current usage and future requirements is also discussed.

. The issues associated with the break-bulk and bulk shipping and handling that must be addressed as part of the land use planning effort will be summarized. In addition, a list of questions that the Advisory Board members may want to pose to industry representatives is attached.

II. GENERAL MARKET TRENDS FOR BULK CARGO SHIPPING

A. Recent History of Break-Bulk and Bulk Shipping and Handling

Ship cargo is generally classified as containerized, break-bulk or bulk cargo. There is a separate profile report on container shipping. This profile report focuses on the latter two categories of cargo.

Bulk cargo includes commodities such as grain or liquid petroleum products, which are transported within the holds of ships, and transferred directly into tanks, train cars or other storage receptacles at the dock. Bulk cargo has two subcategories, dry bulk and liquid bulk. Break-bulk cargo is cargo that is transported in a form that can be visually identify as discrete, countable units, such as bags of coffee beans. A subcategory of break-bulk cargo is called "neo-bulk" and it refers to cargo that comes in odd shapes or large units, such as automobiles and iron and steel products. This report will discuss general break-bulk cargo, neo-bulk, dry bulk, and liquid bulk cargo separately because there are significant differences with respect to growth forecasts and facility requirements for each of the four cargo types identified.

There are three significant developments in maritime trade that shape the recent history of bulk and break-bulk cargo shipping: (1) increasing containerization of cargo, (2) increasing trade between the U.S. and Pacific Rim countries, and (3) increasing use of the land bridge concept, where cargo bound to and from the Eastern U.S. is shipped through West coast ports, instead of by an all water route through the Panama canal.

The advent of containerized cargo shipping led to significant reductions in the volume of general break-bulk cargo being handled at Bay Area ports in the past twenty years. This shift simply reflects the efficiency and economy of container shipping. Most of the cargo that used to be transported in break-bulk mode is now transported in containers. General cargo that continues to be transported in the break-bulk mode is either cargo that cannot, or should not, be containerized, or cargo shipped to or from a country that does not yet have the infrastructure to accommodate container shipping.

The trend toward containerization of cargo has had less of an impact on the volumes of neo-bulk cargo because, by definition, that type of cargo is of a size or shape that is not conducive to

shipment in containers. Dry and liquid bulk cargo is transported in ships that are essentially large containers, and thus, the trend toward containerization should not affect dry bulk and liquid bulk volumes.

Increasing trade with Pacific Rim countries is primarily reflected in increases in the volume of container cargo, however, neo-bulk cargo has also increased as a result, in particular imports of automobiles and iron and steel products have risen. Similarly, West Coast ports benefited from increasing exports of grain and other dry bulk cargos from the U.S., although the Ports of Stockton and Sacramento dominate the grain trade relative to other Bay Area ports.

The trend toward the "land bridge" concept, and the resulting increase in intermodal cargo, also primarily affects the growth rate in containerized cargo because containerized cargo is more easily transferred through West Coast ports to inland markets.

B. Bay Area Growth Forecast for General Break-Bulk, Neo-Bulk, Dry Bulk and Liquid Bulk Cargo

The Bay Conservation and Development Commission (BCDC) and the Metropolitan Transportation Commission (MTC) undertook a regional seaport planning effort which led to the adoption of the San Francisco Bay Area Seaport Plan in 1982. The Seaport Plan was amended in 1989. In preparing the Seaport Plan, and the 1989 amendments, BCDC and MTC commissioned a growth forecast for cargo trade in the Bay Area. The forecast, prepared by Manalytics Inc. in 1988, projects that containerized cargo will increase to more than four times its present volume in twenty years. However, the growth prospects for non-containerized cargo are less robust. (See Table 1 which show the projected increases in volume for the period from 1990 to 2020.)

The attached chart taken from the 1988 forecast report shows the relative projected increases in both containerized and non-containerized cargo. It clearly shows a relatively flat growth trend for all but the containerized cargos. One explanation for this difference is simply the growing demand for consumer products, which tend to be containerizable. Another factor is that a significant portion of the growth forecast for containers is rail-oriented growth, that is growth attributable to import demand or export production of containerizable cargo from areas outside of the local Bay Area market.

TABLE 1

SAN FRANCISCO BAY AREA CARGO FORECAST

BREAK BULK, NEO BULK, DRY BULK

AND LIQUID BULK

BASELINE FORECAST - (1000'S of metric tonnes)

	1990		2000	2020
	Actual	Forecast		
BREAK BULK				
Foreign	387	281	480	1,083
Domestic	-	10	18	63
NEO BULK				
Autos-Imports	313	321	337	454
-Exports	54	6	10	23
-Domestic	-	59	87	193
Iron & Steel				
-Imports	630	444	438	693
-Other	16	28	26	40
Newsprint				
-Imports	113	277	391	811
-Other	6	1	1	1
DRY BULK				
Grain				
-Export	6	174	279	418
-Other	-	81	112	164
Iron & Steel Scrap	697	621	795	914
Petroleum Coke	624	605	696	607
Sugar	48	641	586	508
Other Bulk	1,031	1,554	2,590	4,799
LIQUID BULK	---	37,600	44,560	47,485

Port staff is not aware of any developing trends that would significantly influence the forecasted volume of dry bulk or liquid bulk cargo through Bay Area ports.

With respect to break-bulk cargo, there is a recent development that was not anticipated when the Seaport Plan forecasts were prepared. In 1991, the Port of San Francisco was designated as the nation's third port of entry and distribution for coffee futures, along with New York and New Orleans. Although most of the current coffee imports handled in the Bay Area arrive in containers, there is some potential for increased break-bulk coffee imports as a result of this development.

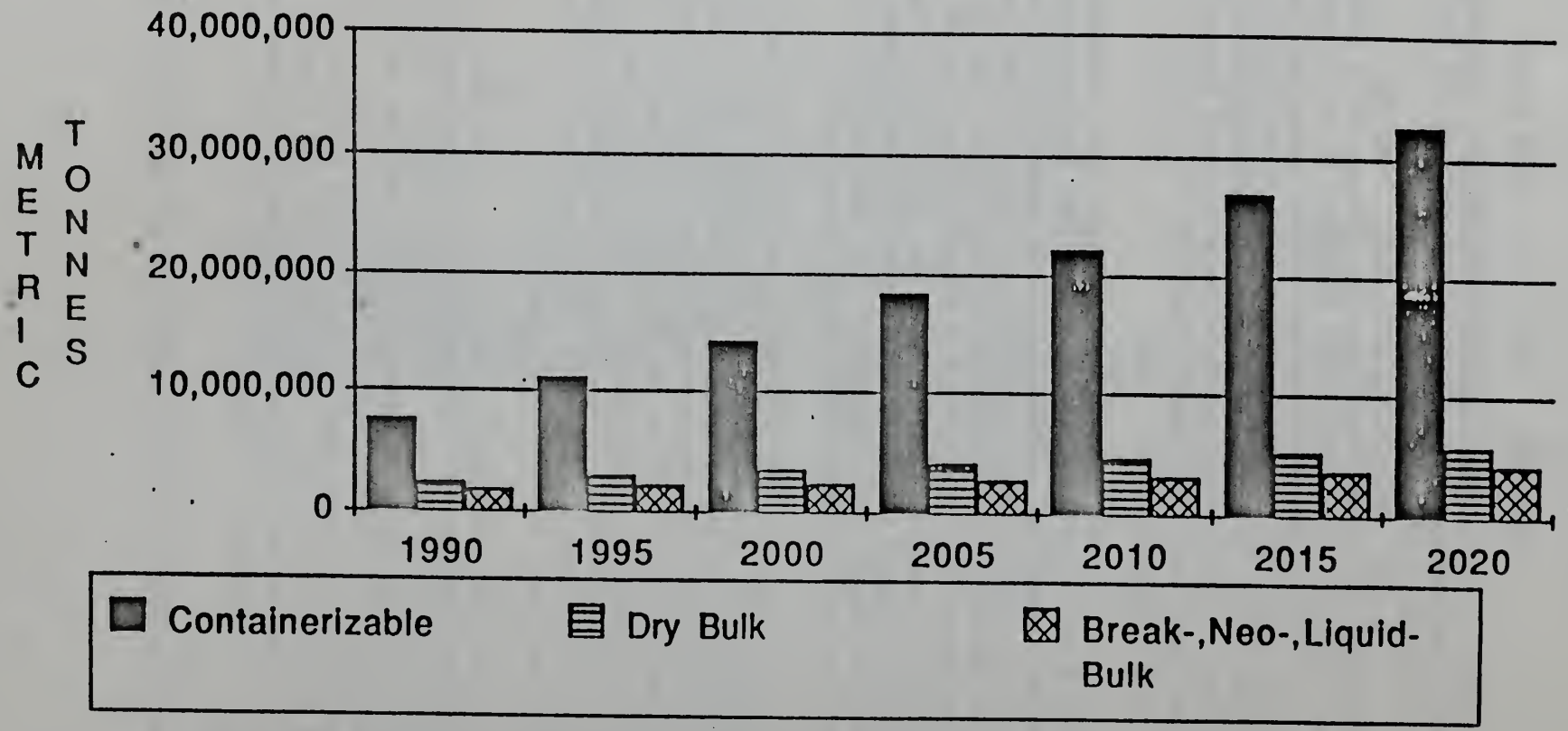
Coffee can be preserved so that importers are able to store the coffee beans for a year or longer without deterioration. This fact, together with the potential development of a spot market for coffee as a result of the commodities futures designation, should increase the demand for coffee warehousing in the Bay Area. In New York, one entrepreneur marketed a combination break-bulk terminal and warehouse to coffee exporters. He convinced them to forego containerized shipping lines, and instead use "tramp operators," a sort of charter ship that delivers the beans break-bulk fashion directly to the warehouse where they are stored.

The designation by the Commodities Future Trading Commission is not effective until July, 1992. Therefore, it is too early to say whether the Port can or should try to encourage a similar coffee break-bulk terminal/warehouse operation in San Francisco. There is an existing dedicated coffee warehouse at Pier 50, where break-bulk ships could also be accommodated. This is an issue that warrants continued consideration. The profile on Cargo Support Services will discuss this matter further with respect to the potential increased demand for coffee warehousing.

With respect to neo-bulk newsprint, a recently identified trend would indicate a potential decrease in the volume of newsprint shipped into Bay Area ports. Currently, where newsprint manufacturers have ready access to rail at the source, newsprint is being transported by rail rather than by water. There are still two main producing areas where rail is at a disadvantage, Vancouver Island and Northern Europe. However, to the extent that Bay Area forecasts are based on population increases alone, and do not take into account increasing competition from rail, they may be overstated.

The Seaport Plan process included an analysis of the marine

Figure 3. BASELINE FORECAST



Seaport Plan, As Amended, 1989

terminal capacity in the Bay Area for break-bulk, neo-bulk, dry bulk and liquid bulk. The attached chart shows that there is either sufficient or excess capacity at combination break-bulk, combination neo-bulk, pure break-bulk, pure neo-bulk (auto),and pure neo-bulk (steel and newsprint) terminals through the year 2020. The analysis projected a need for additional terminal capacity at pure dry bulk terminals by 2010 and pure liquid bulk terminals by 1990.

C. Implications for the Port of San Francisco

The Port of San Francisco's situation with regard to non-containerized cargo is characterized by flat or slow growth trends in cargo volumes, while expenses are increasing due to heavy maintenance requirements at the older break-bulk and bulk facilities, and higher costs for testing and disposal of dredged material. In addition, due to the current excess of capacity of bulk and break-bulk terminals, higher costs can not be easily passed through to users because of regional competition.

There are no recent forecasts available for non-containerized cargo specific to the Port of San Francisco. However, all of the non-containerized cargo combined makes up less than five percent of the total cargo volume handled by the Port. Given the low base amounts of break-bulk, neo-bulk, dry bulk and liquid bulk cargo handled by the Port, and the relatively low growth levels forecast for the region, the lack of precise forecasts for the Port may not be critical for the purposes of the land use planning process.

General Break-Bulk Cargo:

In 1991, general break-bulk cargo made up less than one percent of the total cargo volume handled at the Port. With only 34,000 metric tons of true general break-bulk cargo, the Port of San Francisco handled less than 15% of the general break-bulk cargo volume forecast for the region in 1990. In fact, as the Port's trading partners in South America improve their container facilities, it is likely that break-bulk cargo volume will decline. For example, coffee beans were once transported exclusively as break-bulk cargo, but are now primarily a containerized cargo. The principal general break-bulk cargo in the Bay Area is military cargo. It is handled at the Oakland Naval Supply station and at the military installation in Alameda, and the Port could not successfully compete for that type of cargo.

Table 3

DEMAND FOR NEW MARINE TERMINALS THROUGH 2020

(number of berths) [1, 3]

Terminal (Pure and Combo) Forecast Level	Existing[2]	Projected Demand for Additional Terminals 1990	2000	2010	2020
CONTAINER[4]					
Baseline	24	(2)	12	26	44
High		2	16	30	44
Low		-	12	26	42
BREAK BULK					
Baseline	14	(13)	(11)	(7)	(1)
High		(14)	(12)	(7)	0
Low		(14)	(11)	(7)	(1)
NEO-BULK					
Baseline	15	(9)	(8)	(5)	(2)
High		(9)	(9)	(6)	(3)
Low		-	(10)	(6)	(4)
DRY BULK					
Baseline	5	(2)	(1)	1	3
High		(2)	0	1	3
Low		-	-	1	3
LIQUID BULK[5]					
Baseline	5	1	3	4	6
High		1	3	5	7
Low		1	3	4	6

1 Parentheses indicate a surplus of terminal cargo handling capacity stated as an equivalent number of berths. The figures shown are cumulative; for example, using the baseline container forecast, the 26 new berths required by 2010 include the 12 required by 2000. Although the estimates are stated as a number of berths, they assume each berth is accompanied by the appropriate amount of backland and equipment.

2 Includes currently active, publicly-utilized terminals plus those terminals being modified or under construction and terminals to be constructed that have a BCDC permit. Proprietary sugar terminal at Crockett, scrap steel terminals at Oakland and Richmond, Leslie Salt facility at Redwood City, and petroleum terminals are not included above. Estimates of the number of existing berths are approximate (e.g., a container vessel generally requires up to 1000 feet of wharf; therefore, 2100 feet of wharf could be viewed as 2 berths).

3 Estimates may overstate demand; see text in Chapter IV.

4 Includes the demand for new roll-on/roll-off (RO/RO) terminals other than for automobiles. No new LASH facilities are forecast.

5 Demand estimates are for terminals to handle all liquid bulk except for crude oil, petroleum products and molasses handled at proprietary terminals.

As discussed above, there is some potential for an increase in break-bulk cargo as a result of the recent designation of the Port of San Francisco as a port of entry and distribution for coffee futures. The Port is well positioned to capture the anticipated growth in coffee volume, whether the beans arrive break-bulk, or in containers. The Port handles 91% of Bay Area coffee imports from Latin America, which supplies the majority of coffee for the North American market. In fact, coffee is the second largest commodity in terms of dollar value and volume for the Port. In 1989, the Port handled 82,000 metric tons of coffee beans worth nearly $170 million.

Neo-Bulk Cargo:

The Seaport Plan forecasts identified three principal neo-bulk cargo types handled in the Bay Area: (1) automobiles, (2) newsprint, and (3) iron and steel. The Port's principal neo-bulk facilities include its newsprint terminals at Piers 27, 29 and 48, and its auto terminal at Pier 70. The Port does not currently have facilities dedicated to iron and steel products.

Newsprint is the Port's largest single import commodity by volume (147,000 metric tons in 1990.) The Port handled 85 % of all Bay Area newsprint imports in 1990, and 98% of all Canadian newsprint imports to the Bay Area. However, the Port handled only 16% of total West Coast imports. Because the majority of California's population is in Southern California, and because newspaper circulation depends on large readership populations, San Francisco cannot hope to attract a higher percentage share of West Coast volumes. In fact, the Port is concerned that its current market share could be reduced as a result of increasing competition from railroads for transport of newsprint cargo.

The Port's other major neo-bulk facility is the auto-terminal at Pier 70 and Seawall Lot 349. The current operator imports Mercedes-Benz automobiles, a small volume operation relative to the auto terminals in Richmond and Benecia which handle imports of Japanese automobiles and exports of American automobiles. Those ports offer the large land area and value added services (radio installation, etc.) that are important to maintaining high volume operations. Although the Port has larger areas of vacant land near its Pier 80 and Piers 94-96 container terminals, there are no plans to develop that land for auto terminal use. Because there is potential demand for additional container facilities, and given that this land is adjacent to the current container facilities, it makes sense to reserve it for that purpose, especially since

continer use yields higher revenue than would an automobile terminal. The Port receives approximately $17 per automobile, while it receives $33 per container, and containers can be stacked three-high.

There is some potential for development of an auto terminal at the former Hunters Point Naval Shipyard because automobile terminals require less expensive capital improvements than containers, (since cranes are not required) and large, relatively flat bay shore parcels are available for storing the automobiles. This concept should be explored further as part of the Hunters Point planning process. However, in light of the relatively flat growth in the import and export of automobiles, additional facilities in San Francisco would be in direct competition with other Bay Area ports for limited volumes .

The other major neo-bulk commodity in the Bay Area is iron and steel. The Port has no dedicated facilities for handling this import commodity. This is because most of the material imported requires additional processing before it is ready for use, and the major fabricators are located in the East Bay. However, there may be a possibility of dedicating terminal space for imports of finished iron and steel products if warranted due to demand generated by the construction of the Mission Bay Development.

Dry - Bulk Cargo:

The Port has a very small percentage of Bay Area dry bulk cargo volume. The principal dry bulk operation at the Port is a fish meal importing operation at Pier 92. The fishmeal is converted to animal feed and then delivered to chicken farms in Northern California. The Port also has a large grain elevator at Pier 90, which is under lease to Continental Grain Co. However, the facility is not used now. The facility was constructed to allow ships coming down from the Delta to "top off" with additional grain after they reached the deeper water in the Bay. After the shipping channel to the Ports of Stockton and Sacramento was deepened, there was no longer a need to leave the Delta with a light load and "top off" in San Francisco.

The growth forecasts for grain exports are low for the Bay Area ports, with the bulk of such exports being handled by Stockton and Sacramento. The Seaport Plan identified a potential need for additional grain terminals by 2010 to handle excess volume from the Stockton and Sacramento ports. However, Port analysts do not expect San Francisco to be competitive in attracting that forecasted increase in grain exports because the grain would have

to be brought here from the agricultural areas, and ther are other ports that are likely to be more competitive in that market.

The dry bulk cargo with the largest forecast growth rate is non-metallic minerals, such as fertilizers and potash. However, given that demand for these commodities is primarily in agricultural areas, San Francisco is not well positioned to capture this growth.

One alternative for use of the grain elevator that may be feasible is for storage of coffee beans. As discussed above, the Port has recently been designated as the nation's third port of entry and distribution for coffee futures. Some projections show coffee imports increasing by as much as 500,000 to 1,000,000 bags per year, thus, demand for coffee warehousing should increase. New Orleans, another designated coffee port, has successfully converted a grain elevator for coffee storage. However, the cost of converting the facility may be quite high, and it remains to be seen if the concept is workable in San Francisco. This concept will be explored further in the profile on Cargo support Services.

Liquid Bulk:

Although the forecasts for liquid bulk show high volume for Bay Area ports, the principal liquid bulk commodities are petroleum products handled by proprietary facilities, such as Chevron's. San Francisco's only liquid bulk facility is at Pier 92 where tallow is pumped hot from a nearby rendering plant into the ship hold. There is also a minor non-edible oil importing operation. As discussed in the San Francisco Terminal Modernization EIR, the Port's liquid bulk operation could be displaced eventually when the South Container Terminal is fully developed. In light of the absence of refineries in San Francisco, the Port does not expect an increase in demand for liquid bulk facilities.

In sum, the implications for the future of break-bulk and bulk cargo at the Port of San Francisco, given the regional forecasts and local conditions, is principally that of maintaining existing operations in the face of rising costs, increasing competition from other ports, as well as competition from other high value uses at the Port of San Francisco.

III. Regulatory and Environmental Issues:

A. Regulatory Issues

For purposes of the Port's land use planning effort, the principal regulatory issues associated with the future of break-bulk, neo-bulk, dry bulk and liquid bulk are: (1) Compliance with BCDC's plans and policies, (2) regulation of dredging, and (3) opportunities for increased public access.

1. BCDC Plans and Policies for Break-bulk and Bulk Facilities

The Port's active non-container cargo terminals (i.e. served by ships) include: Pier 27/29 (newsprint), Pier 48-50 (newsprint), Pier 70 (automobiles), Pier 80 (break-bulk), Pier 90 (grain terminal-inactive but under lease), Pier 92 (fishmeal, tallow), Piers 94-96 (break bulk) and Seawall lot 349 (South Container Terminal expansion area, sand reclamation.) There are several other former break-bulk piers that are used for cargo shipping support services, such as the cotton warehouse at Pier 15/17 and the coffee terminal/warehouse at Pier 50. However, because these operations do not involve direct ship service at the Pier they will be addressed in the profile on Cargo Shipping Support Services.

BCDC plans and policies applicable to the active non-container terminals vary by location. The policies with respect to Piers 27/29 are contained in BCDC's Special Area Plan. That plan provides that when and if maritime use is phased out at piers 9 through 35 on the Northern Waterfront, no new development shall occur until a Total Design Plan for the entire area is adopted by BCDC. The Port expects to continue using Piers 27/29 as a newsprint terminal, and thus compliance with BCDC policies is not an issue at this time.

The remainder of the Port's non-container active terminals are located south of China Basin channel. This area is covered by BCDC's Seaport Plan, and each of the active terminals are designated for "Port Priority Use." As active terminals, these shoreline areas are restricted to marine terminal use. Interim uses are permissible, but must be readily displaceable when the area is needed for marine terminals or directly-related ancillary activities. The Seaport Plan provides that permitted uses within a Port priority use area include "marine terminals and directly-related ancillary activities such as container freight stations, transit sheds and other temporary storage, ship repairing, support transportation uses including trucking and

railroad yards, freight forwarders, government offices related to the Port activity, chandlers and marine services. Other uses, especially public access and public and commercial recreation development, are permissible uses provided they do not significantly impair the efficient utilization of the Port area."

These provisions are consistent with the Port's current plans with respect to the active non-container terminals, with one possible exception. As discussed below in Subsection 2, the Port was unable to dredge Pier 48 this past year. A 24' draft ship went aground there in February, 1991 and the facility has not been open to newsprint ships since that time. In order to open the facility, 160,000 cubic yards of material would have to be dredged. That amount exceeds the total amount that the Port was permitted to dredge at all of its facilities last year. If Pier 48 remains closed to ships due to dredging it may be necessary to identify premissible interim uses for the facility. Due to BCDC regulations limiting use to "readily displaceable" uses, the Port would expect to encounter limitations on lease terms that have implications for both the potential uses as well as revenue.

2. Regulation of Dredging

The regulatory issue which has the greatest potential to affect the future of break-bulk and bulk cargo shipping in the Bay Area is the regulation of dredging, particularly the disposal of dredged material.

As discussed previously in the profiles on Container Shipping and the Cruise Industry, the Port of San Francisco must perform regular maintenance dredging of sedimentation to maintain the appropriate depths at the ship berths. In past years, the Port was authorized to dredge 500,000 cubic yards of material each year and dispose of the material at the Alcatraz disposal site. In 1991, due to concerns over the environmental affects of disposal at Alcatraz, both the Port of Oakland and San Francisco were authorized to dispose of only 100,000 cubic yards each at Alcatraz. It is anticipated that similar limits will be in effect again this year for material that is of "questionable" contaminated nature.

As a result, the Port had to identify the most critical locations for dredging. In February 1991, a 24 foot draft ship went aground at Pier 48, Pier 29 (newsprint terminal) was closed for six months, and Nedlloyd ships reported difficulties at Pier 80 due to insufficient depths. As a result of the regulatory issues, the Port was not able to keep all of its break-bulk facilities ope

rational. The Port chose to dredge Pier 80 (63,159 cubic yards), and did the bare minimum at Piers 27-29. Additional dredging will be done at Pier 80, in June once the requisite sediment tests are completed. To open Pier 48 would require dredging 160,000 cubic yards. In light of the limitations and costs of both sampling and dredging, the Port may not open Pier 48 this year. In addition, the dredging at the cruise ship terminal was deferred until next year.

The regulatory agencies, principally the U. S. Army Corps of Engineers, BCDC, and the Regional Water Quality Control Board are engaged in developing a Long Term Management Strategy (LTMS) for designating a pool of long-term disposal sites. This process will include an analysis of overall dredging requirements and environmental concerns, leading to selection of appropriate disposal sites. The alternatives to Alcatraz disposal that are being analyzed include both ocean disposal and upland disposal sites. The LTMS involves a two phase study process, with actual implementation expected in 1994.

Until alternative sites are authorized, Bay Area Ports will have to reduce dredging volumes to the absolute minimum required, particularly with respect to material that does not meet standards for clean sediment. If dredged material is not sufficiently clean, upland disposal will be required. Although in 1991 one authorized upland location near the Bay was available, and used by the Port of San Francisco, there is insufficient capacity there to meet the needs of Bay Area Ports.

Even assuming that the LTMS process leads to alternate sites designations, the cost of dredging is likely to rise significantly. For example, with disposal at Alcatraz the Port used to pay $2.00 - 3.00 per cubic yard for dredging. This past year the Port disposed of 12,000 cubic yards of material at an upland location at a cost of $22.50 per cubic yard. Although estimates of the cost of one of the disposal alternative being analyzed, that of ocean disposal, is less at approximately $8-10 per cubic yard, this would still represents a significant increase. The LTMS process is also analyzing another upland disposal location at Sonoma Baylands, the final disposal costs are not known at this time, but it is assumed that it would cost as much or more than ocean disposal.

3. Opportunities for Public Access

Providing public access is an objective of both BCDC and the Port of San Francisco. Many citizens have expresses interest in

enhancing public access in or near active terminals to allow people to experience a "working waterfront." This objective will be particularly difficult to achieve at the non-containerized terminals not only because of safety issues, but because revenue streams from these activities will not likely support the costs of improvements necessary to provide public access opportunities. The issues attendant to incorporating public access at such sites will be discussed with industry representatives at the Advisory Board Subcommittee session on the Break-bulk and Bulk Cargo Shipping.

B. Environmental Issues

Because there have not been any recent development plans for non-containerized cargo terminals, there is not a recent environmental assessment of the Port's break-bulk and bulk facilities and operations. An EIR will be prepared as part of the Waterfront Land Use planning process. Environmental issues associated with the Port's break-bulk and bulk facilities and operations will be analyzed as part of that review process.

Environmental issues that will likely be addressed in that analysis include transportation related impacts associated with truck traffic and employee related vehicle trips, air quality impacts associated with related truck and automobile use, biological impacts associated with dredging, water quality impacts, and light and noise impacts.

The environmental impacts associated with dredging and dredged spoils were addressed at a regional level in the Seaport Plan EIR, and will be studied further as part of the Long Term Management Strategy that the regulatory agencies are preparing.

In the China Basin area, environmental impacts associated with maritime operations were discussed in the Mission Bay EIR in light of the planned change to residential and commercial uses in the vicinity of Piers 48-50. When a preferred plan for those Piers is identified as part of this land use process, issues of compatibility with the uses planned for development in that area will be addressed.

Environmental impacts associated with other non-maritime development in the Bay Area also have implications for future generations at the Port's active non-container cargo terminals. Traffic congestion affects the efficiency of terminal operations. In addition, development pressure in areas near Port facilities may result in displacement of industrial support services to the terminal uses.

C. Implications for the Port of San Francisco

The most significant implications for the future of the break-bulk and bulk cargo shipping and handling operations at the Port associated with the regulatory and environmental issues identified above stem from the regulation of dredging. The implication of the dredging volume limitations and cost increases are potentially more problematic for break-bulk facilities than for container facilities. The attached chart compares the cost of disposing of 6,000 cubic yards of material at upland locations and at Alcatraz. The chart also shows those costs as a percentage of revenue from the facility. As shown, while the cost of disposing of 6,000 cubic yards from Pier 29 and Pier 94 was the same ($141,378), that amount represents 85% of the Port's revenue from Pier 29, but only 9% of the Port's annual revenue from the container terminal at Pier 94.

Given the much lower revenues associated with bulk and break-bulk shipping, the question presented for the Port is whether it should, or can, absorb these costs in order to maintain operational break-bulk facilities. The Port will have to examine each type of cargo operation individually to determine whether or not some of the increased costs can be passed on to the user, or avoided through consolidation of facilities or changes in operations. Until the issue is resolved by the regulatory agencies, the ultimate cost implications will not be known. In the interim, the lack of available disposal sites, and the high cost of disposal at the existing authorized locations, has prevented the Port of San Francisco from keeping all of its break-bulk shipping berths open for business.

With respect to enhancing opportunities for public access, the Port is committed to this objective to the extent that it is feasible to provide such opportunities at the active break-bulk and bulk terminals. Identifying opportunities at minimal cost will be critical to achieving this objective in light of the other demands being place on the existing revenue stream from this type of maritime activity. The lack of significant growth prospects eliminates an opportunity that exists with respect to container terminal development, that of incorporating public access improvements as part of an overall development project.

The implications associated with the environmental impacts from break-bulk and bulk cargo shipping and handling will not be fully understood until those operations are analyzed as part of the Waterfront Plan EIR. However, in light of the relatively flat

PORT OF SAN FRANCISCO

1991 MAINTENANCE DREDGING

ANALYSIS OF TESTING AND DISPOSAL COSTS

	UPLAND		ALCATRAZ
	Pier 29 (6,000 cyds)	Pier 94 (6,000 cyds)	Pier 27 (6,000 cyds)
TESTING COSTS	$4,878	$4,878	$3,718
DISPOSAL COSTS	$135,000 - @ $22.50 cyd -	$135,000	$10,980 @ $1.83 cyd
STATE LANDS FEES	$1,500	$1,500	$1,500
	$141,378	$141,378	$16,198
	(85%)	(9%)	(6%)
REVENUES FY 90-91	$165,903	$1,600,000	$272,013

Upland Testing Program Included:

* Bulk Sediment, Bivalve Larve and Amphipod Bioassays (9 episodes) and plus tests to determine suitability of dredged material for sludge impoundment liners (i.e. compaction, particle size analysis and petroleum hydrocarbons).

Alcatraz Testing Program Included:

* Bulk Sediment & Bivalve Larve for each facility.

growth projections, it is unlikey that there will be a significant change in the existing environment as a result of these operations. More problematic are the implications associated with new development encroaching into industrial zones that served as a buffer for Port activities. The Waterfront Plan EIR will have to examine these ongoing operations in light of the changing environment in which they exist. Potential conflicts may arise, particularly to the extent that the Port attempts to intensify maritime uses in residential areas (principally the northern waterfront and South Beach/Mission Bay area).

IV. FINANCIAL AND ECONOMIC ISSUES

A. Financial Issues

As discussed in the profile on container shipping, the financial issue confronting the Port with respect to container shipping is that of obtaining and allocating capital for improvements necessary to capture a significant share of the large container cargo volume increases forecast for the region. In contrast, the financial issue that is presented with respect to break-bulk and bulk shipping and handling is that of obtaining and allocating capital to maintain existing operations in the face of flat or slow growth, rising maintenance and dredging costs, and excess terminal capacity within the region.

As is shown on the attached table, direct revenue associated with bulk and break-bulk shipping combined is less than one-fourth that produced by container shipping terminals. Although the cost of new capital improvements necessary to improve capacity and cargo volume at the container terminals is quite high ($60 - $300 million) those investments may be justified by higher revenue returns to the Port. In light of the low growth projections for break-bulk and bulk cargo, however, and the relatively low revenue produced by the operating terminals, the Port is not assured of recouping its operating expenses in the future as costs continue to rise.

The Port can not be certain of the ability to pass all of the increased costs directly to the user because of competition, both from other ports in the region, who also have excess capacity in these types of facilities, as well as from other forms of transportation, such as rail. In addition, the Port must consider the "opportunity costs" associated with maintaining uses that produce marginal returns, when the same space dedicated to

container shipping, for example, may yield much higher revenues. Although the finger piers are not suitable for conversion to container use, they could be used to provide warehousing and other support services.

The public trust under which the Port holds its land is intended to foster maritime commerce such as that which occurs at break-bulk and bulk terminal facilities. The Burton Act, by which the State transferred the property to the Port, was structured to allow the Port to use its land in a manner that would generate revenue to further maritime commerce, navigation, fisheries and public recreation. Given the current regulatory context and in light of the extraordinary infrastructure development costs that ports must bear, the question presented is whether the Port can rely on its land alone to generate sufficient revenue to internally subsidize all potential public trust uses.

B. Economic Issues

Obviously, direct revenue to the Port is not the only consideration in deciding the future of break-bulk and bulk cargo shipping at the Port of San Francisco. Although there is not an independent study of the economic impacts associated with break-bulk and bulk shipping, it is clear that these operations contribute significantly to the local economy. For example, the newsprint terminal supplies the major newspapers in the City. Even the relatively small tallow operation at Pier 92 has over 50 permanent employees. In addition, it should be noted that break-bulk and bulk cargo handling is more labor intensive than container shipping and handling, thereby providing a significant number of jobs for longshoremen. All of these factors must be carefully weighed when making decisions concerning the future of break-bulk and bulk shipping at the Port.

C. Implications for the Port of San Francisco

The implications for the Port of San Francisco from the financial and economic issues associated with break-bulk and bulk cargo operations will vary depending upon the particular operation in question. The Port must examine the respective cost/revenue relationships for each facility, as well as the overall economic issues attendant to the business. The Port must also pay careful attention to the economic health of the individual businesses that operate within this industry. In addition, efforts must be made to reduce costs whenever possible, for example, by consolidating operations to minimize dredging expenses.

The ultimate issue is whether or not the Port will be able to rely on its land alone to generate revenue to achieve the full potential of all public trust uses on Port land. If the Port can not generate sufficient revenue internally to meet this important objective, it must first look to external sources of financing. As discussed more fully in the profile report on Container Shipping, the prospects for receiving funds from either government sources or private business are not particularly promising. If external financing is not forthcoming, then the Port may have to make difficult choices in allocating its financial resources among the various public trust uses.

V. DESCRIPTION OF EXISTING OPERATIONS AND FACILITIES

Break-bulk and bulk cargo require different types of dockside infrastructure depending upon the specific cargo being handled. This type of cargo is handled at finger piers and at the container terminals at the Port of San Francisco. In both cases, large transit sheds / warehouses are located close to the face of the dock in order to facilitate immediate storage and protection of the cargo. Loading and unloading is done either through quayside cranes or equipment on-board the cargo vessels. Despite advances in machine automation, bulk cargo handling remains a labor-intensive and time consuming function.

The following material identifies the facilities at the Port that are currently used for break-bulk and bulk shipping operations. There are a number of other finger piers that could potentially be called by break-bulk or bulk ships if there was a need, and sufficient financial resources to pay for necessary dredging and facility maintenance and improvements. Many of the finger piers not used as active shipping terminals are used for warehousing cargo and container cargo sourcing operations. These operations, such as the cotton warehouse at Piers 15/17 and the coffee terminal at Pier 50 will be discussed in detail in the profile on Cargo Support Services.

As noted above in Section II, the Seaport Plan process included an estimate of available capacity at break-bulk and bulk facilities in the region. In preparing that analysis, the assumption was made that "six terminals along the San Francisco waterfront north of Chian Basin were eliminated because thery are not currently active." (San Francisco Bay Area Coargo Forecast to 2020 and the Future Demand for Marine Cargo Terminals, Ocober 1988, Manalytics, Inc. p.63.) Even after those facilities were removed from

consideration, the Seaport Plan shows an excess of capacity for everything except liquid bulk facilities in 1990.

The Seaport Plan, as revised in 1989, shows that as of 1990 there was a surplus of 13 break-bulk facilities, 9 neo-bulk facilities, and 2 dry bulk facilities in the region. That study then shows how those facilities could be absorbed over time as demand grows slowly through the year 2020. By 2020, theoretically there would be excess capacity in both break-bulk and neo-bulk, with dry bulk and liquid bulk requiring 3 an 6 new facilities respectively. Of course, it is improbable that ports will be able to maintain these surplus facilities over a thirty year period so that they will be available as demand increases, unless some productive interim use can be made of the facility.

A. Description of Existing Operations

1. Break-Bulk Facilities

General cargo and cargo shipped in individually-packaged units or "loose" cargo make up break-bulk cargo. The Port of San Francisco handles break-bulk cargo principally through the North and South Container Terminals (Piers 80 and 94/96) in the southern waterfront. Examples of break-bulk cargo handled at the Port include bagged agricultural products, such as coffee beans.

Because most break-bulk ships are "self-sustaining" (meaning the loading and unloading of cargo are done by crane equipment on-board the vessels), most break-bulk facilities consist of dock-side transit shed space and equipment for the transfer of cargo from the vessel to the sheds, such as fork-lift trucks, trailer/tractor units, or even dock-side mobile cranes. For example, bags of coffee are loaded onto pallets for transportation between the vessel and storage shed. Transfer from the vessel to the shed is accomplished through fork-lift trucks, whose maneuverability and loading capacities suit the layout of finger pier sheds.

2. Neo-Bulk Facilities

In addition to break-bulk cargo, certain cargo, such as automobiles, newsprint, and steel products, are not conducive to handling in a homogeneous fashion. These neo-bulk cargo are often shipped in large quantities, and because of the variety of commodities that have this characteristic, dock-side facilities vary depending on the specific commodity that is handled.

There are several facilities at the Port of San Francisco for the handling of neo-bulk cargo. Automobile imports are handled at Pier 70 and Seawall Lot 349 and to a lesser extent, at Pier 33, by Isis Imports Ltd. Automobiles can also be handled at Piers 50 and the North and South Container Terminals. Newsprint terminals are located at Piers 27 and 29, and, until the inability to dredge closed the facility, at Pier 48.

a. Automobiles

Automobiles are shipped on special cargo ships known as ro-ro, which is short for "roll on-roll off." As the name suggests, the automobiles are driven onto and off the ro-ro vessels, whose 6,000 vehicle capacity make them resemble large multi-deck floating parking lots. Even though an automobile terminal does not require specialized equipment, such as gantry cranes, it needs to have sufficient parking facilities for the automobiles either at dock-side or nearby in order to minimize the time and distance for loading or unloading of the vehicles.

b. Newsprint

Because, newsprint is packaged and shipped in rolls, special equipment is required for the handling of this type of cargo. A sideport ship facilitates the off-loading of the newsprint rolls directly at the finger piers. Once on the pier, special vacuum-lift trucks lift and move as much as four rolls of newsprint at a time for storage in the transit shed.

3. Dry-Bulk Facilities

Dry-bulk cargo includes items that are loaded or unloaded on conveyor belts, or by spouts or scoops, and that are not stored in individual units. The "flowable" nature of this cargo allows it to be stored loose in either covered or open facilities. There are four main types of dry-bulk cargo: 1) grain products 2) ore and ore concentrates 3) wood chips, and 4) chemicals and fertilizers.

Dry-bulk cargo can also be shipped through special containers. The Port of San Francisco handles two types of dry-bulk cargo (grain/animal feed and sand/gravel) through facilities located in the vicinity of the Islais Creek Channel on the southern waterfront.

The Continental Grain Company operates a grain terminal at Pier 90 while the Tidewater Sand & Gravel Company operates a sand reclamation facility on Seawall Lot 352. Animal feed is handled at Pier 92 for distribution to local chicken farms.

a. Grain Terminal and Animal Feed Facilities

The Continental Grain Company leases a grain terminal at Pier 90, although it is not used currently. The two main functions of a grain terminal are storage and delivery of grain. The grain is delivered to the terminal by rail and truck and stored in large concrete grain elevators. From there, a conveyor system transports the grain to dockside where it is diverted onto an on-dock grain-loading facility that transfers the grain onto the grain vessels through six spouts. The grain elevators are usually located a short distance from the loading pier in order to minimize the distance that the grain needs to be transferred.

The Metropolitan California Stevedore Company operates a fishmeal terminal at Pier 92. Fishmeal is shipped to the terminal, where it is processed into animal feed and delivered to various chicken farms in northern California.

b. Sand and Gravel Facilities

The Tidewater Sand and Gravel Company operates a sand reclamation facility on Seawall Lot 352. Special vessels dredge sand outside the San Francisco Bay (in the vicinity of the Presidio) and transport the material to Seawall Lot 352, which occupies part of the future expansion area for the Southern Container Terminal. From there, trucks haul the sand to local sellers.

4. Liquid-Bulk Facilities

Liquid-bulk includes liquid products, such as petroleum products or vegetable oil, that are shipped in a variety of ways. Some are stored in steel cylindrical tanks and shipped within standard 20 foot containers while others are shipped as bulk cargo (drums) within cargo vessels or pumped directly from tank trucks or rail tankers into special cargo vessels with built-in deep storage

tanks. The only liquid-bulk facility located in the Port of San Francisco is the tallow works factory and terminal on Pier 92. Operated by Baker Commodities, Inc., the facility prepares hot tallow for shipment overseas where it is manufactured into soap products.

B. Description of Existing Conditions at Facilities

As part of the preparation of the Port's Strategic Plan a site survey was done to determine the condition of the Port facilities. Prior to producing this profile, the Port's maintenance staff revisited the various piers to complete a visual inspection of the topside structures. A copy of the survey findings are attached as an exhibit to this report.

In sum, the report shows that the facilities at Piers 27/29, 48, 80, and 94-96 are in good condition. Facilities at Piers 70, 90 and 92 are in fair to poor condition. The maintenance department emphasized that the condition of the facilities can change fairly quickly due to pest infestation or exposure to the elements. There are, in fact, a number of finger piers that are in an extremely deteriorated condition, such as Pier 24.

In a typical Port lease, the tenant will assume responsibility for the surface improvements, but the Port assumes responsibility for the substructure. Maintaining the pilings and deck is very expensive due to the difficulties associated with working in and over the water. Given this fact, the Port allocates its maintenance budget in favor of revenue producing facilities. Therefore, while there are vacant facilities that could potentially be used for break-bulk or bulk shipping should the demand arise, the longer a facility is vacant or underutilized the more expensive it becomes to upgrade the facility for a prospective tenant. This in turn affects the relative attractiveness of such facilities for prospective tenants.

C. Implications for the Port of San Francisco

Currently, the active terminals for break-bulk and bulk shipping are reasonably well maintained, with the exception of Piers 90 and 92. As these facilities age, maintenance costs will increase. In addition, the cost of maintaining adequate depth for the ships that call at these facilities will likely increase.

For the facilities that are in the vicinity of the container terminals, there is a possibility of converting facilities to

container operations if they are underutilized or too costly to operate. The finger piers cannot be converted to direct use as container terminals. Therefore, the Port has an interest in the continued economic health of existing operations to ensure that revenues will continue to cover costs over the long term.

There are a number of Port facilities that could potentially be used for break-bulk and bulk shipping if future demand materializes as forecast over the next thirty years. If the Port wants to be able to capture that growth over the long term, it must identify alternative interim uses that can bear the cost of facility upkeep for a long period of time.

VI. CONCLUSION

The outlook for break-bulk and bulk cargo shipping and handling is not as optimistic as is the case for the container shipping industry. The forecasts show flat or slow growth trends for break-bulk and bulk cargo volumes over the next thirty years. As a result of the shift to containerization of cargo, there is a surplus of capacity for these types of facilities. The Seaport Plan analysis concluded that there would be demand for new facilities for only liquid bulk and dry bulk during the next thirty years. These are not areas where the Port has substantial operations now, and San Francisco is not in a strong competitive position for those types of commodities.

Although demand for the Port's break-bulk and bulk facilities will not increase dramatically in the foreseeable future, the costs of maintaining the facilities and dredging the ship berths will increase significantly. The cost increases associated with dredging are potentially more problematic for non-containerized operations because these tend to be lower revenue operations, and thus are less able to absorb the cost increases.

There are significant differences between the various operations that constitute break-bulk and bulk shipping. In addressing the financial and economic issues associated with break-bulk and bulk cargo operations, the Port must examine the respective cost/revenue relationships for each facility, as well as the overall economic implications of each industry. Efforts must be made to implement efficiencies and reduce costs whenever possible.

Eventually the issue may arise as to whether the Port should

subsidize break-bulk and bulk operations at the Port. A related question is whether the Port will be able to afford to subsidize such operations. In creating the Port, the intent was to enable the Port to be self-supporting by using its land to either directly accommodate maritime commerce, navigation, fisheries and public recreation, or to generate revenue to fund public trust uses. However, as the costs of developing, maintaining and operating maritime facilities increase, and regulatory limitations become more restrictive, the original premise is called into question.

Port facilities that are actively used for break-bulk and neo-bulk commodities have been reasonably well maintained. The Port's dry bulk and liquid bulk facilities at Piers 90 and 92 are not in good condition. The key questions with respect to those facilities is whether or not they should be converted to container terminal use as they are located within the vicinity of the Port's container terminals. With respect to the active terminals at the Port's finger piers, the expectation would be for those facilities to continue in their current use for the forseeable future.

VII. DISCUSSION ISSUES

There are a number of issues that the Advisory Board should consider in the decision-making process with respect to land allocations for break-bulk and bulk cargo shipping and handling.

1. Are there recent trends that would call into question the Seaport Plan forecasts for break-bulk and bulk shipping?

2. Assuming that the forecasts are valid, what are the implications for the Port of San Francisco?

3. Should the Port expect break-bulk and bulk facilities to be self-supporting, or should certain costs, like dredging, be subsidized?

4. What do you see as the prospects for obtaining revenue from sources external to the Port? Should the land use planning process assume a change in the current financial structure for funding Port improvements?

5. Are there opportunities for public access within break-bulk and bulk shipping terminals that can be implemented at low cost? If not, should the Port subsidize those improvements, and if so, what priorities should be established for allocating funds?

6 Should the Port attempt to reserve vacant or underutilized facilities that could be used for break-bulk or bulk shipping pending an increase in demand and reduction in excess capacity over the next thirty years. What are the opportunity costs associated with this strategy? What interim uses are appropriate and viable for those facilities?

PROPOSED QUESTIONS FOR EXPERTS IN BREAK-BULK AND BULK CARGO SHIPPING AND HANDLING OPERATIONS

1. Are there any recent developments of which you are aware that would call into question the growth forecast for break-bulk and bulk cargo shipping and handling for the region? (See Table 1, and accompanying charts.)

2. The growth forecasts together with the facility capacity estimates for the Bay Area indicate that there will be demand for additional dry bulk and liquid bulk facilities, while there will be surplus capacity at break-bulk and neo-bulk terminals over the next thirty years. Do you share this view?

3. Do you foresee any specific implications for the Port of San Francisco from recent trends in the industries that make up the various break-bulk and bulk operations?

4. Do you see any opportunities for expansion of existing uses?

5. What support services do break-bulk and bulk cargo shipping and handling operations rely upon? Are these operations well served by support services in the area?

6. Currently, break-bulk is primarily handled at Pier 80. Can that use continue in the future as demand for container terminal space increases?

7. How will break-bulk and bulk operations respond if the Port attempts to pass on the anticipated higher costs of dredging?

BULK
2/12/92

PORT OF SAN FRANCISCO
CARGO-HANDLING FACILITIES

Condition Rating:

Good - Limited deterioration which, with minor repair, could be maintained at the present rating and would remain fully operational.

Fair - Some deterioration which, with repair work, could be maintained at the present rating or potentially brought up to a Good rating. Structures rated Fair may have portions considered Good and some minor elements with a Poor rating.

Poor - Significant deterioration which, if left unattended, could result in the structure becoming unusable and potentially condemned in the future.

Condemned - Structures designated as Condemned by the Port. These structures are unsafe and not in use.

Pier 33: Automobile Storage

7,050 SF Leased Shed Space (Isis Imports)
Construction: Concrete piles, reinforced concrete deck
Pier: Fair
Fender: Poor
Shed: Fair

Piers 27/29: Newsprint Terminal

3 Berths with 35' MLLW alongside Pier 27, 20' at Pier 29
2.5 AC Open Storage
601,700 SF Shed Space
Construction: Concrete piles, Concrete deck
Pier: Good (After earthquake repairs)
Fender: Good - Pier 27
Fair - Pier 25
Shed: Good

Piers 19/23: Foreign Trade Zone

Pier: Fair
Fender: 19:Fair, 23:Fair-Poor
Shed: Good

Piers 15/17: Cotton Warehouse and Container Stuffing Operation

2 Berths with 35' MLLW alongside (not dredged)
2.5 AC Open Storage
256,000 SF Shed Space (385,990 SF Total Leased)
Construction: Concrete-jacketed timber piles, Reinforced concrete and timber decks
Pier: Poor
Fender: Poor
Sheds: Fair

Pier 48: Newsprint Terminal

2 Berths with 35' MLLW alongside (not dredged)
177,400 SF Shed Space (283,077 SF Total Leased)
Construction: (48A) Timber Piles & Deck
(48B) Concrete Piles & Deck
Pier: Apron, Piles & Deck Surface - Good
Fender: Good
Shed: Good

Pier 50: Coffee Warehousing and Ship Repair

2 Berths with 35' MLLW alongside (not dredged)
Leased SF: Western Rim - 175,063 SF
Service Engineering - 912,000 SF
Construction:
Pier: Good
Fender: Poor
Shed: Good

Pier 70: Automobile Terminal and Ship Repair

2 Berths with 40' alongside
24.5 Total Acres, 22 AC Vehicle storage, processing & loading
(572,273 SF Total Leased)
Construction: Timber piles & deck at connecting structure, main pier has steel piles, steel beams and timber deck.
Pier: Poor
Fender: Fair-Poor
Shed: Not Applicable

Pier 80: Container and Break-bulk Terminal

4 Deepwater Berths (40' MLLW), Berth D at 35'MLLW
Total: 69 AC
5,200 TEU capacity reefer outlets
CFS: 85,750 SF
Shed A: 225,000 SF
Shed D: 171,000 SF
Construction:
Pier: Good
Fender: Good (In progress or expected to begin in near future)
Shed: Good

Pier 84:

1 Berth, 35' MLLW alongside (not dredged)
Vacant? - 11,470 SF
Construction: Timber Piles & Deck
Pier: Poor
Fender: Poor
Shed: Not Applicable

Pier 90: Grain Terminal

1 Berth, 40' MLLW alongside
2 million bushel storage capacity
100 car rail car loading yard
6 grain loading spouts
Total Leased Area: 148,760 SF
Construction: Timber & asphalt deck on timber pilings, reinforced concrete silos
Pier: Poor
Fender: Poor
Shed: Not Applicable

Pier 92: Liquid Bulk Facility, Fishmeal Terminal

1 Berth, 35' MLLW alongside
10 AC Open Storage, Bulk Oil Facilities
Total Leased Area: 56,400 SF
Construction: Concrete piles & deck, timber apron
Pier: Poor
Fender: Fair-Poor
Shed: Poor

Piers 94/96: Container Terminal

3 Deepwater Berths (40' MLLW)
151 AC, 75 developed for terminal
12,500 TEU capacity reefer outlets
CFS: 185,000 SF
Construction:
Pier: Good
Fender: 94 - Good (In progress or expected to begin in near future)
96 - Good
Shed: Good

Seawall Lot 352 (South Container Terminal Expansion Area)
Currently used as a sand reclamation facility.

DIRECT ANNUAL REVENUE TO PORT FROM CARGO SHIPPING TERMINALS AND FACILITIES

1990/1991

Break-Bulk General Cargo		$100,000
Neo-Bulk	(Newsprint)	$580,000
	(Automobiles)	$500,000
Dry-Bulk	(Fishmeal, Rent Only)	$ 30,000
	(Sand and Gravel)	$111,800
	(Continental Grain)	$289,000
Liquid-Bulk	(Tallow, Rent Only)	$125,000
TOTAL		$1,735,800

Container Terminals Piers 80,94-96 (including wharfage, dockage, demurrage and crane rental.)	$8,000,000

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PORT OF SAN FRANCISCO
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WATERFRONT PLAN ADVISORY BOARD

STATEMENT OF FACTS AND ISSUES AS TO THE LAND USE REQUIREMENTS OF THE COMMUTER FERRY INDUSTRY

(Revised 6/2/92)

The following material provides a summary of the facts and issues relating to land use requirements of the Commuter Ferry Industry, as identified in the profile report and in the work-shop with industry representatives:

I. FACTS AND ISSUES RELATED TO THE ADEQUACY OF CURRENT LAND AND FACILITIES TO MEET FUTURE INDUSTRY NEEDS

- The commuter ferry industry is expected to continue to grow for the foreseeable future. The MTC Bay Area Ferry Plan predicts a 30-35% increase in commuter ferry passengers coming to San Francisco by the year 2000(from approximately 3,000 passengers in the morning rush hour to 4,000 - 4,250). Currently the only permanent passenger ferry facility in San Francisco is the Golden Gate Ferry facility at Ferry Plaza. Additional temporary facilities exist at Pier 1/2 and at Ferry Plaza to serve passengers on Red and White and Harbor Bay Island service.

- Given this anticipated growth Port Staff conducted an analysis to determine the most appropriate location for expansion of permanent commuter ferry landing facilities along the waterfront. Given that most commuter ferry passengers would continue to have destinations in downtown San Francisco it was determined by Staff that expansion should occur near the Market Street Transit Corridor and near the Central Business District. Of all the sites investigated it was determined that expansion of the temporary facility at Pier 1/2 would be the most appropriate site. The Port has already begun construction of a permanent four berth facility at Pier 1/2 which is being funded out of regional, state, and federal funding sources.

- The demand for additional permanent commuter ferry landing locations beyond those already planned for Pier 1/2 will be driven by growth in the number of commuters. The two largest factors that will determine this growth are changes in the technology of ferry boats and the continuation of operating subsidies to the industry. If major breakthroughs can be made in ferry technology (leading to a reduction in commute times), and if the price for commute service on ferries is competitive with other forms of mass transit, then the possibility exists demand will grow for an additional facility. In addition demand will also grow for sites for support services such as a fuel dock.

II. IMPLICATIONS OF REGULATORY AND ENVIRONMENTAL ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- It is a generally accepted public policy goal for the San Francisco Bay Area to expand the use of commuter ferry service; therefore, generally speaking the regulatory and environmental climate encourages expansion and continued operation of the commuter ferry industry. Still, environmental review will need to be conducted on expansion of the Pier 1/2 facility as well as on any new commuter ferry facilities. Additionally public access opportunities will need to be provided at any new permanent facility.

III IMPLICATIONS OF FINANCIAL AND ECONOMIC ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The biggest financial issue in regards to the commuter ferry industry is the continuation of subsidies, both operations subsidies that pay for subsidized fares on commuter ferries and capital subsidies to pay for expansion of permanent commuter ferry facilities. Operating subsidies currently cover 35% - 40%, on average, of the total operating costs of most commuter ferry operations. Competition for this money with other forms of mass transit is becoming much more severe. Operating subsidies are absolutely necessary if commuter ferry fares are to continue to be competitive with other forms of mass transit.

  Capital subsidies for new facilities, while still not abundant, are often easier to secure. The Port has been able to secure grants totalling $9 million for the Pier 1/2 project.

- The Port's revenue stream from the commuter ferry industry is generated from month to month rental charges to operators, per passenger fees and a percentage charge for all concession sales on the vessels. As currently set, the revenue stream from Pier 1/2 will not allow the Port to re-coup enough revenue to cover the annual maintenance and up keep of the new terminal. The Port is negotiating a new lease structure for the operations at Pier 1/2 that would allow the Port to break even on operating costs once terminal improvements are completed. Due to the continuing need for subsidies it is not expected that the commuter ferry industry will generate any net new revenue for the Port.

COMMUTER FERRY INDUSTRY PROFILE

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Introduction:

This report will focus on commuter ferry operations at the Ferry Building. Recreational ferry use will be examined in the report on excursion boat operations (scheduled for March 3rd). This profile includes the following:

> General market trends in transit use around San Francisco Bay. The discussion includes an examination of the primary transportation corridors and how future commuter demand on those corridors will effect the commuter ferry industry in San Francisco.

> Regulatory and environmental implications related to the ferry industry. This section indicates that ferries are generally perceived of as a benefit to the environment and recommended as a traffic mitigation measure in proposed larger real estate developments.

> Financial and economic conditions of the ferry industry. This section examines both operating and capital resources necessary for the continued health of the industry, and prospects for continued aid from regional and state governmental agencies.

> Existing conditions and proposed plans for accommodating the ferry industry in San Francisco. This section highlights the various operators on the Bay and describes the current level of service each provides. In addition, a description of the capital improvements being made to the North Commuter Terminal (north of the Ferry Building at Pier 1/2) is provided.

A set of concluding implications for San Francisco and a list of questions for that the Advisory Board members may want to pose to the industry representatives is also attached.

Commuter Passenger Ferries

Passenger ferries on San Francisco Bay have been operating since the late 1800's providing access to San Francisco from the North and East Bay. Ferries provided the primary mode of transportation on the Bay until the completion of both the Golden Gate and Bay Bridges in the 1920's and 1930's. As late as the 1920's, the Ferry Building in San Francisco was the second busiest passenger terminal in the world, with over 50 million passengers passing through the Ferry Building each year. However, with the increasing popularity of private automobiles, and mass transit across both Bridges, the number of ferry passengers continued to drop throughout much of the 20th century. Recently a case has been made for increased ferry service as an alternative mode of transportation across the Bay due primarily to increasing traffic congestion on the Bay Bridges and feeder highways.

Most of this report is derived from drafts of the Metropolitan Transportation Commission's (MTC) San Francisco Bay Area Ferry Plan, being prepared by Pacific Transportation Management. The Port of San Francisco has been a participant on the Technical Advisory Committee overseeing the development of the plan. Production of the plan was required by Senator Quentin Kopp (Senate Bill 2169), as a step toward coordinating all ferry services on the Bay. The SF Bay Area Ferry Plan went further by developing, and having MTC adopt, a regional capital plan for necessary improvements around the Bay. The capital plan, prepared as part of Phase I of the Plan, has been instrumental in aiding community efforts to obtain state transportation money from Proposition 116 (Clean Air and Transportation Impact Act), and other sources.

I. General Market Trends in Mass Transportation around San Francisco Bay

Commuter Growth to San Francisco

In recent decades, the East and South Bay have experienced unprecedented growth both in residential and business markets. Back office, manufacturing, wholesale trade, warehousing, and general retail employment has grown faster outside of San Francisco than in than the City over the last 5 years. San Francisco however, has remained, and is projected to be, the dominant employment center in the region over the next 10-20 years. The City's daytime population is double its resident population of 723,959. And approximately half of the City's work force (575,000) commute from the suburbs.

Mass transit and ridesharing currently account for about 76% of all commuter travel to downtown San Francisco, which contrasts with 11% transit use for the entire Bay Area region. Commuter ferries on San Francisco Bay carry approximately 2,700,000 transit trips annually out of approximately 450,000,000 total transit trips. Several different organizations -- Golden Gate Bridge, Highway, Transportation District, Red & White, and Blue & Gold Fleets -- provide commuter ferry service to downtown San Francisco from various communities as well as recreational excursions to other points on the Bay.

Projected Increase in Traffic Volumes on Bay Bridges

Traffic volumes on both Bay Bridges currently exceed the designed capacity of each facility. The Environmental Impact Report for the I-280 Transfer Concept indicated both the Bay and Golden Gate Bridges were at capacity in the morning and evening peak hour commutes in 1984. Both bridges currently experience slow travel speeds and queuing for periods longer than one hour, and both are projected to experience deficiencies in capacity over the next 20 years. There are currently no capital or construction plans to enhance the carrying capacity of either bridge.

Due in part to the congestion on Interstate 80 and 680, Caltrans has begun preliminary work on a major re-construction project for these corridors. The construction work will disrupt traffic flows for several years. One of the possible traffic mitigation measures being considered by the State and MTC is to run additional ferries to San Francisco from Vallejo or Richmond, capturing commuter traffic before autos enter the I-80 corridor.

Improvements in Passenger Ferry Vessels

The current ferry vessels serving the Bay are, on the average, in excess of 15 years old. The average speed at which the vessels cross the Bay is approximately 10-15 knots. While many of the vessels have proven reliable forms of transportation, age and lack of speed is a growing problem in some corridors.

Technological advances in vessel construction and engine design has allowed the production of faster, more efficient vessels which would greatly reduce travel time across the Bay. The Bay Crossing Study and the SF Bay Area Ferry Plan concluded that the purchase of new vessels by key municipalities around the Bay could decrease travel time to San Francisco by 15-25% (cutting a 30 minute trip from Sausilito to 20 minutes), while maintaining comparable operating costs. With new sources of State and Federal funding available (discussed in Section III), several communities are beginning the process of purchasing new vessels for their respective commuter operations.

Proposed Increase in Number of Ferry Operators/Improvements in Service

Private Initiatives:

Harbor Bay Isle Maritime.
Harbor Bay Maritime is part of the Doric Development Company. Harbor Bay's ferry service was started as a way to attract prospective home buyers to the residential and commercial community being planned and developed by Doric on Bay Farm Island, just south of Alameda.

At the time of this writing, Harbor Bay Isle Maritime is undergoing review by the Public Utilities Commission (PUC) for approval of its application to provide common carrier ferry service from Harbor Bay Isle to San Francisco. Harbor Bay Isle has proposed to run daily service (7 round trips) from the Bay Farm Island to the Ferry Building, landing vessels temporarily on the southside of the Ferry Plaza (to the rear of the Ferry Building) until the improvements at Pier 1/2 are completed.

Harbor Bay's application to the PUC has been challenged by the Blue & Gold Fleet, which currently serves Alameda and Oakland, due to the negative impact a new service may have on the number of passengers riding Blue & Gold vessels. Current projections indicate that when Harbor Bay begins service the number of passengers using Blue & Gold could decrease by 20-30%. A decision by the PUC should be rendered in late February or early March on Harbor Bay's application.

Berkeley Charter Ferry Operations.

Berkeley has had a long history of ferry operations, dating back to the late 1800's. Immediately following the Loma Prieta earthquake emergency ferry service was established from the Berkeley Marina. The ferry carried up to 500 passengers in the morning commute and 1,600 total passengers per day. When the Bridge was repaired and re-opened, ridership dropped to 500-700 passengers daily. In early 1990, the schedule was reduced, and total ridership diminished to 110-250 riders daily.

An ad-hoc citizen group, the Berkeley Ferry Committee was formed during this period of time. The Committee contracted for a non-subsidized Friday service which operated for several months in 1990. The service carried 60-70 riders daily until late spring 1990. There are currently no runs to San Francisco from Berkeley. However, the Committee continues to advocate ferry service and has monitored with interest the Port's proposed Pier 1/2 project.

Public Initiatives:

Metropolitan Transportation Commission (MTC), San Francisco Bay Area Ferry Study Recommendations.

In recent years, as public sources of operational subsidies have tightened, policy studies by MTC (Bay Crossing Study 1990, the SF Bay Area Plan 1992) have made a series of more modest recommendations encouraging the use of small to medium sized, high speed ferries along routes that prove capable of generating sufficient passengers to decrease necessary subsidies and improve fare box to operating cost ratios. This policy approach, of identifying markets and developing a ferry system that functions efficiently, is similar to the research that led to the development of the Golden Gate Ferry System (in the late 1970's). The Larkspur Terminal, in particular, appears to be the best model of how a ferry terminal and system should operate on the Bay, and as a result, handles the most passengers of all Bay area terminals (2450-3500 a day).

MTC, under the direction of Senate Bill 2169, is well underway in preparation of a capital and operations plan for the commuter ferry industry on San Francisco Bay. Phase I of the plan was completed in late 1990 and provided a regional capital plan highlighting needed infrastructure investments.

The basis of this latest MTC work, the SF Bay Area Ferry Plan, is predicated on communities being able to fund much of the capital investments necessary for the industry from federal and state grant sources. The study projects how many passengers can be attracted to the system should such improvements be made. However, in the examination of the existing runs, only the Larkspur, Vallejo, and Tiburon routes operate close to a non-subsidized status.

Given the existing ferry industry revenue conditions, the recommendations of Phase I of the SF Bay Area Plan encourages "interlining" existing routes to develop essentially three routes (Larkspur-San Francisco-Sausilito, Oakland-Alameda-San Francisco-Tiburon, Vallejo-San Francisco). In addition to the interlining concept the plan recommends a series of improvements to encourage more passengers. The improvements to the existing services are --

1. Provide an opportunity to transfer to another vessel at the Ferry Building;
2. Increase predictability of the timing of the runs;
3. a total increase in the number of runs.
4. improved connections to ferry terminals by bus and private automobiles, primarily on the embarkation end of the run.

If implemented and other assumptions in the study are fulfilled the Bay Area Ferry Plan predicts a 30-35% increase in commuter passengers coming to San Francisco (from approximately 3000 passengers in the morning rush hour to 4,000 -4250).

The draft Phase II of the SF Bay Area Ferry Plan examines possible additional ferry runs (suggested in MTC's Bay Crossing Study) from communities around the Bay. The study lists 13-15 additional departure points from around the Bay to the Ferry Building. While the study does not provide financing or implementation plans for the proposed routes, the conclusion of Phase II is that sufficient patronage can be generated from Port Sonoma, Martinez, Berkeley (if combined with a Golden Gate Fields run in off-peak hours), Alameda-Bay Farm Island, and San Francisco Airport service to show financial performance equal to existing commuter transit services.

Projected Weekday Trips to the Ferry Building by Year 2000.

Route	Current # of Trips	Proposed # of Trips
Larkspur-SF-Sausilito	46	68
Tiburon-SF-Alameda/Oakland	37	64
Vallejo	6	28
TOTAL	89	160

Possible Increase in Other Types of Commuter Ferries.

Over the last several years, ports around the Bay have been approached by different individuals and organizations offering other possible solutions to the Bay area commute situation. These solutions range from providing auto and truck ferries paralleling congested traffic corridors (such as I-80), to a series of private residential developments around the Bay offering commuter ferries as an amenity, or traffic mitigation measure. In many of the recommended solutions, the proposed alternative was found to have little or no public support and thus not pursued. The use of ferries by private real estate developers as a marketing and amenity tool, however, may have promise with a pending application for the operation of Harbor Bay Isle Ferry, and a proposal from Port Sonoma to run a similar service.

Implications for San Francisco

1. Downtown San Francisco will remain the hub of commuter ferry activity. Downtown San Francisco should remain the central destination of all commuter ferry operations on the Bay over the next 10 years. Employment growth in the City should provide an ever increasing demand for future transit alternatives. Even if suburban growth continues to outpace downtown San Francisco, the growth will probably not be sufficient to justify the cost of additional terminals and service hubs beyond downtown San Francisco.

2. Increased traffic congestion should promote more ferry ridership. As indicated above, both the Bay and Golden Gate Bridges are currently at capacity, with no planned improvements to increase the capacity of either structure. In that same time period, a series of transportation projects are scheduled to go to construction (ie; seismic up-grade of Golden Gate Bridge, re-construction of the I-80 and I-680 corridors) increasing congestion of critical corridors and delay commute time to downtown San Francisco. Caltrans has suggested that an interim ferry service from Vallejo or Richmond may be instituted as a traffic congestion relief measure during the I-80 & 680 reconstruction process.

3. New vessels should attract more ferry passengers. With the advent of new passenger ferry vessel technology, travel time and passenger comfort on the ferries should improve over the next 5-10 years. These enhancements, if new vessels are purchased (as currently planned) should increase the number of passengers using the ferry as means of getting to work.

The SF Bay Area Ferry Plan projects that with the introduction of two new vessels at Vallejo, Oakland/Alameda, and Larkspur, and "interlining" different vessel runs across the Bay, the number of passengers using ferries should increase by 30-35% over the next 5-10 years. However, these projections are dependent on a number of variables beyond the Port's control, such as continued funding and improvements to terminal connections from other forms of mass transit and personal autos.

Commuter Ferry Ridership at the Ferry Building

Route	Current Passenger Levels in AM Peak	MTC Projected AM Peak Passenger Levels (Yr. 2000)
Larkspur	1,400	1,750
Sausilito	300	400
Tiburon	300	360
Alameda/Oakland	325	550
Vallejo	200	900
TOTAL	3,050	3,960

II. Regulatory Issues.

The regulatory environment, for the most part, is favorable for ferry operations in San Francisco. The commuter passenger ferry, in particular, has been viewed as a potential environmental mitigation measure to decrease the number of autos and other vehicles on the road. This favorable status has led the State and Federal governments to develop funding sources such as the Clean Air and Transportation Improvement Act (Prop. 116) and the new Surface Transportation Improvement Act (on the Federal level) that will provide additional funding for ferry vessel purchase, operations, and landside improvements.

Ferry operations by definition are considered public access to the Bay. Several of BCDC's planning documents recommend increased use of ferries for commuter transportation rather than constructing another bridge across the Bay. However, BCDC would still require any new terminal built in San Francisco to maximize public access accommodations for the non-ferry riding public. This requirement was satisfied in the Golden Gate Ferry Terminal, for example, by constructing a viewing deck at the second level that does not require the purchase of a ticket to access the space.

While ferry operations do benefit the environment, the vessels are not without potential impacts. Recent environmental analysis done on ferry projects has focused on such issues as the impact of increased vessel operations on water quality, the impact of constructing terminal improvements, and pedestrian circulation problems around the terminal. Any improvements to the terminal in San Francisco will be subject to environmental review.

From the Port's perspective, most of the significant regulations center on waterside operations of the individual operators and the vessels they control. The Public Utilities Commission (PUC) is the licensing agency for all common carrier operators on the Bay, as well as the state. Operators are required to submit an application

to the PUC describing in detail schedules, operating procedures, and fares for all runs. Applications to the PUC are generally evaluated on the basis of competition, and the skill and quality of the service being offered.

The PUC also reviews and approves any change in the fare rates, and the number of runs proposed by the operator. As the recent application of Harbor Bay Maritime demonstrates, the PUC approval process is the only public forum that allows other operators and concerned parties to file complaints about an application. In the Harbor Bay situation, other operators filed objections to the application due to a fear that the new service would decrease its current level of passengers. To date, the Harbor Bay Isle application has not been approved.

Implications for the Port of San Francisco

1. Ferry facilities in San Francisco should be as accessible to the public as possible. BCDC's primary design goal is to provide public access to the Bay in all development projects. While the nature of ferry operations does provide a great deal of access to the Bay, it is likely that more structured access will be required in a new terminal.

2. Any further improvements done to the San Francisco terminal will require CEQA review and clearance. The grant applications for Phase I and II of the improvements to the North Ferry Terminal at Pier 1/2 (described in Section IV) have included resources for any necessary special studies and fees associated with the project.

3. The extent to which new ferry operations are permitted by the PUC will have an impact on the need for expanded ferry landing facilities in San Francisco.

III. Financial and Economic Issues.

General Financial Issues

Commuter ferries on the Bay have, over the last decade, been treated as a "boutique" form of transit, with the majority of commuter service being provided by operators who also run excursion and recreational runs on the Bay. Revenues generated by the excursion and recreational runs of private operators (Red & White, Blue & Gold), plus subsidy by various public agencies, has helped offset the cost of commuter service.

Public Subsidies for Operations.

Public subsidies for ferry operators have come from a variety of sources. The primary sources are as follows --

Operator	Source of Subsidy
Golden Gate	Golden Gate Bridge Toll Revenue Marin County Transit Development Act
Vallejo	Local Transit Tax Economic Development Agency Grants
Alameda/Oakland	Emergency Relief Grants Local Subsidy; City of Alameda and Port of Oakland
	MTC -- 3% Bridge Toll Grants.

Many of the sources indicated are only temporary, such as EDA and Emergency Relief grants, although they currently cover a large percentage of the ferry operators annual operating costs (on average 35-40% of total operating costs). Moreover, the Golden Gate Bridge Toll total revenues have fallen from previous levels threatening continued level of subsidies for the Golden Gate ferries. In addition, as the provisions of the Americans with Disabilities Act (ADA) are implemented, operators of all transit services will likely need more revenue to offset program and capital costs required to comply with the new legislation. With increasing competition for these funding sources, it appears the sizable operating grants of the past ($700,000 to 800,000 per year) are not likely in the future.

Operators can decrease the need for subsidy by increasing the amount of ridership on each run. The MTC Bay Area Ferry Plan provides a model for increasing the number of passengers (See discussion in Section I). However, in the long run, ferry operations will have to become as cost effective as other forms of public transportation to remain competitive.

Capital Improvement Subsidies.

Revenue sources for costs associated with capital improvements, unlike operating subsidies, appear to be good for the foreseeable future. The following table lists funding sources available for ferry capital improvements (ie; terminal construction, vessel purchases, etc.).

Grant Source	Amounts Available
Federal	
Urban Mass Transportation Authority	On-going Programming (Sections 3 & 9); up to 80% of Total Improvement Costs.
Surface Transportation Re-Authorization	$155 billion (for both surface and mass trnst imprvmts; increase in UMTA allocations; more flex for alt. forms of trnst.)

Grant Source	Amounts Available
State Funding	
CTC - Proposition 116; Clean Air and Transportation Improvement Act	$30 Million (Vallejo $10 million -- 2 vessels and landside imprv; Port of SF $5.8 landside imprv.; Alameda Oakland $2.9 vessel and landside imprv.)
Transit Capital Improvements Funds	Varies from year to year (requires 50% local match).
Flexible Congestion Relief	Varies (Money generated by gas tax revenue)
Local/Regional	
3% Bridge Toll Revenues	North Bridge Group -- $900,000 South Bridge Group -- $650,000 Bridge Toll Revenues -- To be used for matching money for Section 3 and 9 UMTA grants. Excess money programmed by MTC through local requests.
Transportation Development Act	Varies from County to County
State Transit Assistance Funds	Varies; Allocated statewide on pop. basis.

Financial Issues Related to the Operation of Port's Ferry Terminal.

The Port's direct revenue stream from the commuter ferry industry is generated from month-to-month rental charges to operators, off-peak per passenger fees (for the operations of Red & White and Harbor Bay Isle), and a percentage charge for all concession sales on the vessels.

The Port fees currently charged to Red & White at Pier 1/2 are based on the square footage of its facilities placed in Port jurisdiction as well as the number and type of runs. As currently set, the revenue stream generated from Pier 1/2 will not allow the Port to re-coup enough revenue to cover the annual maintenance cost and up-keep of

any terminal improvements. With the additional publicly funded improvements anticipated at Pier 1/2 in the near future (described in Section IV), and a subsequent increase in the number of landings per year, the current lease structure must be revised.

The Port's Tenant Services division has proposed a new lease structure for the operations at Pier 1/2, once terminal improvements are made. As currently proposed, a per landing fee would be assigned to each landing during peak commute hours at Pier 1/2. The commuter landing fees would progressively decline as more landings are made. During off-peak hours at Pier 1/2 (10AM -4PM) a different schedule of fees could be assigned per landing. Given the number of landings anticipated over the next 10 years, the stream of revenue would thus be sufficient to maintain the facilities (both Phase I and II).

Other Financial Issues

As described in Section IV, many of the operators maintain separate facilities in San Francisco for the maintenance, repair and storage of vessels, office operations and alternative landing facilities. These areas along the waterfront generate monthly rents. As new vessels are introduced on the Bay, more space will be needed for storage and maintenance. In addition, as the vessels are used for other operations (such as recreational and Bay excursions) the Port may be able to generate revenue by sharing landing facilities.

Contribution to the Local Economy.

The impact of the commuter ferry industry in the local economy is dependent on the number of runs, vessels and operations on the Bay. As the number of runs are increased over the next several years, the amount of labor needed, fuel consumed, and hours of maintenance required will only increase. As a result, the ferry industry contributes to the local economy in direct and indirect fashion --

Direct
> Fees/rental paid to the Port or primary tenants of the Port (ie; landing fees paid to primary tenants for use of landing facilities).
> Purchase of goods and services by operators;
> Concession sales to passengers;
> Direct spending by ferry operators and employees;
> Employment of residents of San Francisco (ie; Captains, Deck Hands -- 4 per vessel, etc...).

Indirect
> Taxes collected by the City as a result of commuters working in San Francisco (ie; City Income Tax, Sales Tax, Business Tax, etc...);
> Revenue to the City through commuters use of MUNI to get to destinations in the City;
> Jobs supported by commuter spending in the City (ie; restaurants and bars, retail, entertainment, and other service jobs).

Implications for San Francisco

1. Capital Investment Decisions.

Given the uncertainty of operating subsidies for existing vessel runs, the Port has made a concerted effort to finance all ferry terminal improvements through grants from regional and state agencies. The Port has been successful in securing grants for both Phase I -- $1.8 million (from Caltrans and FHWA) and Phase II -- $5.8 million (from the California Transportation Commission). In addition, the Port has made a local contribution to the terminal up-grade project by sacrificing revenue from displaced tenants (due to the demolition of the National Car Rental structure and lost parking spaces).

2. Revenue and Pricing Strategies for Operators.

One of the conditions for using capital improvement money from regional and state transportation agencies is that any landing fees must be set in a manner as to favor the purpose of the investment. That is, as the Port negotiates prices for each landing slot at Pier 1/2, the rate must favor commuter traffic, rather than maximize Port revenues. Port staff has therefore developed a pricing strategy aimed at merely recovering the costs of maintaining the capital investments made at Pier 1/2.

However, given that the new facilities will be owned and operated by the Port, the landing facilities may be accessed by other operations during non-peak times. This flexibility affords the Port an opportunity to generate additional revenues by providing landing facilities for Bay and recreational excursions (to be discussed at Waterfront Planning Advisory Board March 3, 1992). Such a factor could, if developed as a goal of the Phase II improvements to Pier 1/2, lead to a new design of landing facilities to maximize opportunities for excursion and off-peak access to Pier 1/2.

3. Revenue Potential from Commercial/Ancillary Developments around the Terminal.

Additional revenues generated by the Port from ancillary and related commercial developments could be used to help pay for on-going maintenance of the terminal improvements, administrative costs and offset some of the operators landing fees. Several different types of commercial developments could easily be linked to a terminal development and serve the needs of the commuting public. For example, in Vallejo the terminal includes commercial space for a dry cleaners and photo lab. Given the number of potential passengers at Pier 1/2 and the Golden Gate Terminal combined, there may be additional opportunities for consumer services throughout the area, such as magazine/news stand, snack shop, dry cleaners, or cocktail lounge.

As mentioned above, additional storage space, stringer area, and offices will also be required to support new ferry vessels on the Bay. The Port of San Francisco could marginally benefit from leases to the ferry operators for this support space.

IV. Description of Existing Operations and Improvement Plans in San Francisco

In San Francisco, passenger ferry operations along the waterfront occur in essentially two locations -- at the Ferry Building (Golden Gate Ferry, Red & White and Blue & Gold) and at Fisherman's Wharf (Red & White at Pier 41 and 43 1/2; Blue & Gold and at Pier 39). The two locations represent the two different aspects of passenger ferry operations in San Francisco -- the Ferry Building functions primarily as a terminus for commuter runs to San Francisco and Fisherman's Wharf functions as a departure point for passengers accessing the Bay for recreation.

Golden Gate Bridge, Highway, and Transportation District Ferry Operations.

Golden Gate provides daily runs from the Ferry Building (at the San Francisco Terminal to the rear of the Building) to Larkspur, and Sausilito with approximately 1,300,000 commuters annually (representing a 25-30% increase in total number of passengers carried over 1986).

The District operates 4 vessels on the two routes (M.V. San Francisco, Marin, Sonoma, Golden Gate). The Golden Gate vessel is the oldest of the four vessels and is scheduled for replacement in the next several years. In addition, the District is planning to purchase two additional vessel through a combination of Proposition 116 and Urban Mass Transit Administration (UMTA) money (highlighted as part of the SF Bay Area Ferry Plan). The newer vessels are expected to cut commuting time by 25-30% while keeping operating costs even.

The District built the San Francisco Terminal to the rear of the Ferry Building in 1978. The terminal provides landing space for two vessels at a time, with hydraulically controlled gangways to compensate for tidal changes. The terminal provides a protected waiting area (with bathrooms and vending machines) for approximately 400 passengers. The terminal also affords the public a viewing area for arriving and departing vessels from a second floor deck which can be accessed without entering the terminal. In addition, the District leases a portion of the northern stringer at Pier 1 for a protected berth during bad weather and overnight storage of a vessel.

Red & White Fleet Operations.

The Red & White Fleet operates the majority of its runs (to Alcatraz and Sausilito) from Piers 41 and 43 1/2. The Fleet also operates commuter service from Pier 1/2 (to Tiburon and Vallejo). The Red & White's Fleet primary service is recreational in nature with approximately 750,000 - 1,000,000 recreational passengers using the Fleet's vessels annually from Piers 41 & 43, vs. 200,000 - 300,000

commute passengers trips annually from Pier 1/2 (to Tiburon and Vallejo).

Blue & Gold Fleet Operations.

The Blue & Gold Fleet is based in Pier 39's northern marina. The Fleet provides mostly recreational runs around the Bay. Over the last year, the Fleet has also provided commuter service to the City of Alameda and the Port of Oakland using Red & White's barge at Pier 1/2.

Blue & Gold's commuter operations to the East Bay provides 10 runs throughout the day. Patronage on the East Bay runs (under Red & White's operations in 1990) averaged approximately 330 daily. Since Blue & Gold was awarded the East Bay service in 1991, patronage has shown a steady increase (approximately 15-20%), to approximately 375 passengers a day.

Harbor Bay Maritime

Harbor Bay's facilities in San Francisco consists of a temporary barge and gangway located on the southside of the Ferry Plaza, and stringer and warehouse space in Pier 28 for storage of a vessel and repairs. Harbor Bay's common carrier status has yet to be approved by the PUC (See Section I discussion). The Port's policy is to relocate the service to Pier 1/2 once Phase I is completed.

Emergency Access to San Francisco.

As the collapse of a section of the Bay Bridge demonstrated in October 1989, additional temporary ferry access to San Francisco may be necessary in a the event of a natural disaster. MTC has initiated a separate, comprehensive analysis of available modes of emergency transportation access across the Bay. The emergency access study will identify readily available barges, gangways, and vessels, in addition to other means of crossing the Bay, that can be used in the event of major damage to the Bay bridges.

Currently, the north side of Pier 1 is used in the event of an emergency. During the October 1989 earthquake, several barges were secured to the Pier to provide additional access to downtown San Francisco from the East Bay (Richmond, Berkeley, Oakland/Alameda). Once the Bay Bridge re-opened, however, the level of passengers dropped off significantly and only the Oakland/Alameda service remains in operation today (now using Red & Whites barge at Pier 1/2 due to better access for passengers).

Assessment of Existing Terminals

Existing commuter operations at the Ferry Building take place in two locations (see diagram #1). The North Bay commute ferries (Larkspur and Sausilito) land at the Golden Gate Terminal to the rear of the Ferry Building . The East and Northeastern commute ferries (Alameda/Oakland, Vallejo, and Tiburon) land at Pier 1/2 to the north of the Ferry Building.

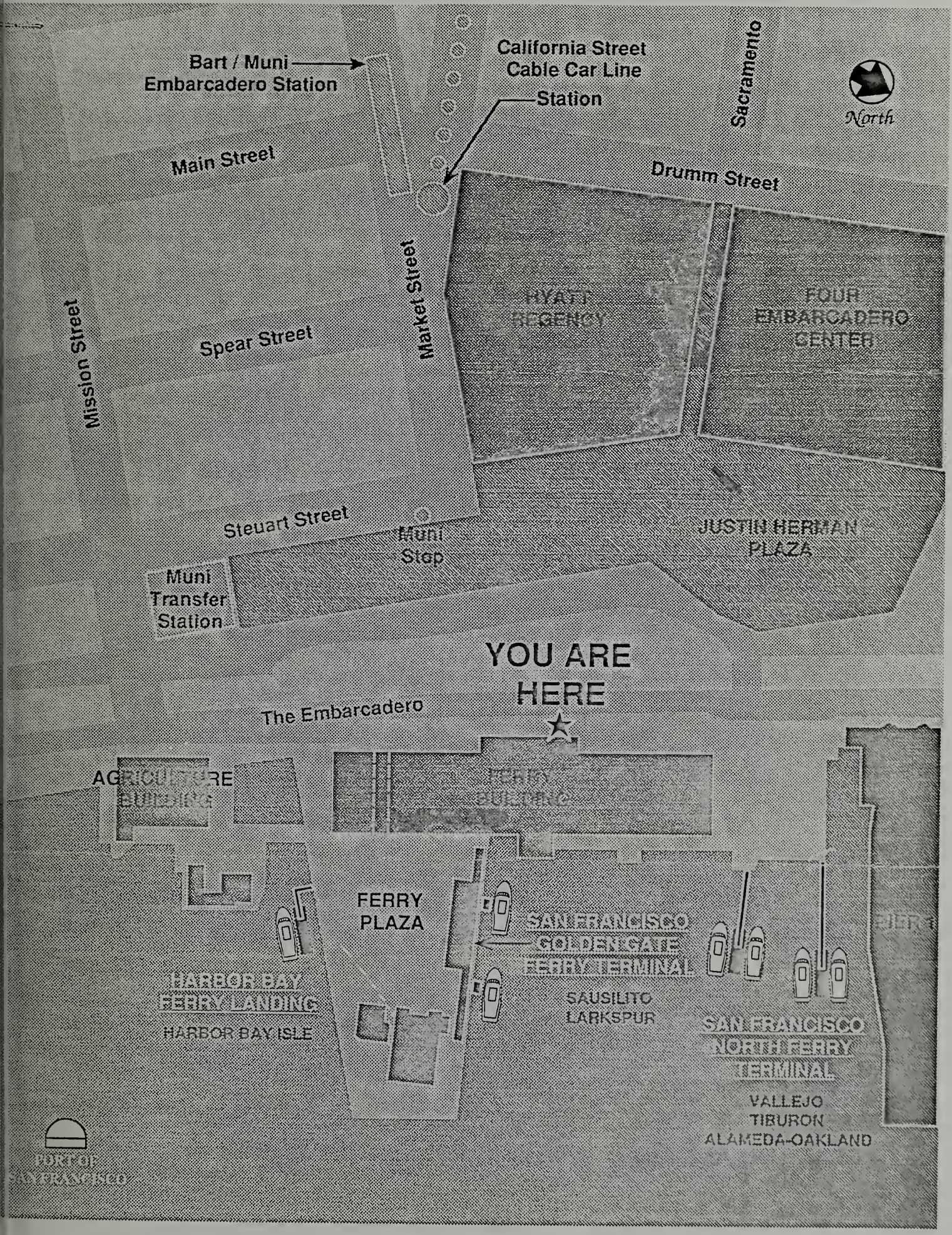


Diagram #1 -- Ferry Landing Facilities at the Ferry Building

Pier 1/2.

Pier 1/2 has been used for a variety of uses over the past decades ranging from a heliport to ferry landing facilities for the Golden Gate Transit District prior to the construction of its private terminal on the Ferry Plaza.

The current Pier 1/2 landing facilities were installed by the Red & White fleet following the October 1989 earthquake. The improvements consist of little more than a barge, gangway and gate with signs indicating the schedules for the Red & White and Blue & Gold departures. MTC provided a grant in 1990 for the erection of a tent in the parking lot as a temporary passenger shelter.

Pier 1/2 was selected by Port Staff as an appropriate location for expansion of ferry landing facilities in downtown San Francisco due to its proximity to the Market Street Transit Corridor and the central business district, and its visibility from the Embarcadero. The Pier 1/2 location was further justified by MTC's SF Bay Area Ferry Plan which indicates that up to 85% of all passengers either walk to work (some up to 10 blocks) or walk to connecting mass transit service in San Francisco. Pier 1/2 provides an opportunity to concentrate ferry landing activities at one facility in close proximity to the Golden Gate Terminal and the foot of Market Street.

Several different locations were examined but rejected for a variety of reasons. The Northern Stringer of Pier 1. This location was seen as marginal due to the congested vessel operations around the landing facilities and narrowness of water space between Pier 1 and 3. Pier 1 is also a longer distance from Market Street and connections to mass transit. The Southern side of Ferry Plaza. The southern side of the Ferry Plaza has always been seen by the operators as a great location for an additional terminal but hazardous due to its exposure to currents and wind. To make the southern side of the Plaza work, a break water would have to be constructed to the southeastern corner of the Plaza to provide a protected harbor for the vessels. Given the cost of the sea wall ($7.5 - 10 million) and the environmental ramifications of constructing such an improvement, the Port Staff chose Pier 1/2 as the best location for an expanded landing area.

The existing facilities at Pier 1/2 were examined as part of Phase I of the SF Bay Area Ferry Plan. The facilities were ranked as either "unsatisfactory" or "marginal" with respect to passenger comfort and accessibility for the disabled community. The Plan goes on to recommend a comprehensive re-design of the facility to be coordinated with future changes in service.

In addition to the evaluation done in the regional study, visual examination by the Port's Maintenance and Engineering Staffs have indicated that the Pier may not be structurally sound during a major seismic event. The Pier is currently tied to both the sea wall (along the Embarcadero right of way) and the pile supported foundation of the Ferry Building. It is believed that in the event of a major earthquake, the weakness of the Pier (due to its age) coupled with its tie to the sea wall and the Ferry Building could lead to a partial or total collapse of the deck.

Planned Improvements to Pier 1/2.

Additional improvements to the Pier 1/2 terminal are therefore necessary in order to better serve the operators and provide comfort and safety for commuters to San Francisco. The Port has embarked on a two phased up-grade to the Pier 1/2 facility. All capital necessary for the improvements has been secured from state and regional transportation agencies. The following describes the proposed improvements --

A. Phase I improvements to the North Commuter Terminal. Phase I was initiated at the request of the Cypress Corridor Council, a citizen/government committee in the East Bay overseeing traffic mitigation measures to alleviate congestion associated with the collapsed freeway.

Phase I improvements (See Diagram #2) include -- installation of a new barge, gangway, and walkway out to the gangway, lighting, railing signs, benches, information kiosk (for the front of the Ferry Building), and boardwalk waiting area for ferries.

Estimated Cost: $1.75 - 1.9 million.

B. Phase II improvements to the North Commuter Terminal. Phase II was initiated on the recommendations of the SF Bay Area Ferry Plan. The Plan called for a major renovation of the North Ferry Terminal. A grant has been secured from the California Transportation Commission under the Clean Air and Transportation Improvement Act (Proposition 116) for funding of Phase II.

Phase II of the terminal up-grade project includes -- seismic reinforcement of Pier 1/2, terminal structure, installation of a second barge, gangway, and walkway out to the gangway, walkway connection from the Golden Gate Terminal to Pier 1/2, and a comprehensive sign program along the Embarcadero to all landing facilities to the rear of the Building.

Estimate Cost: $5.8 million.

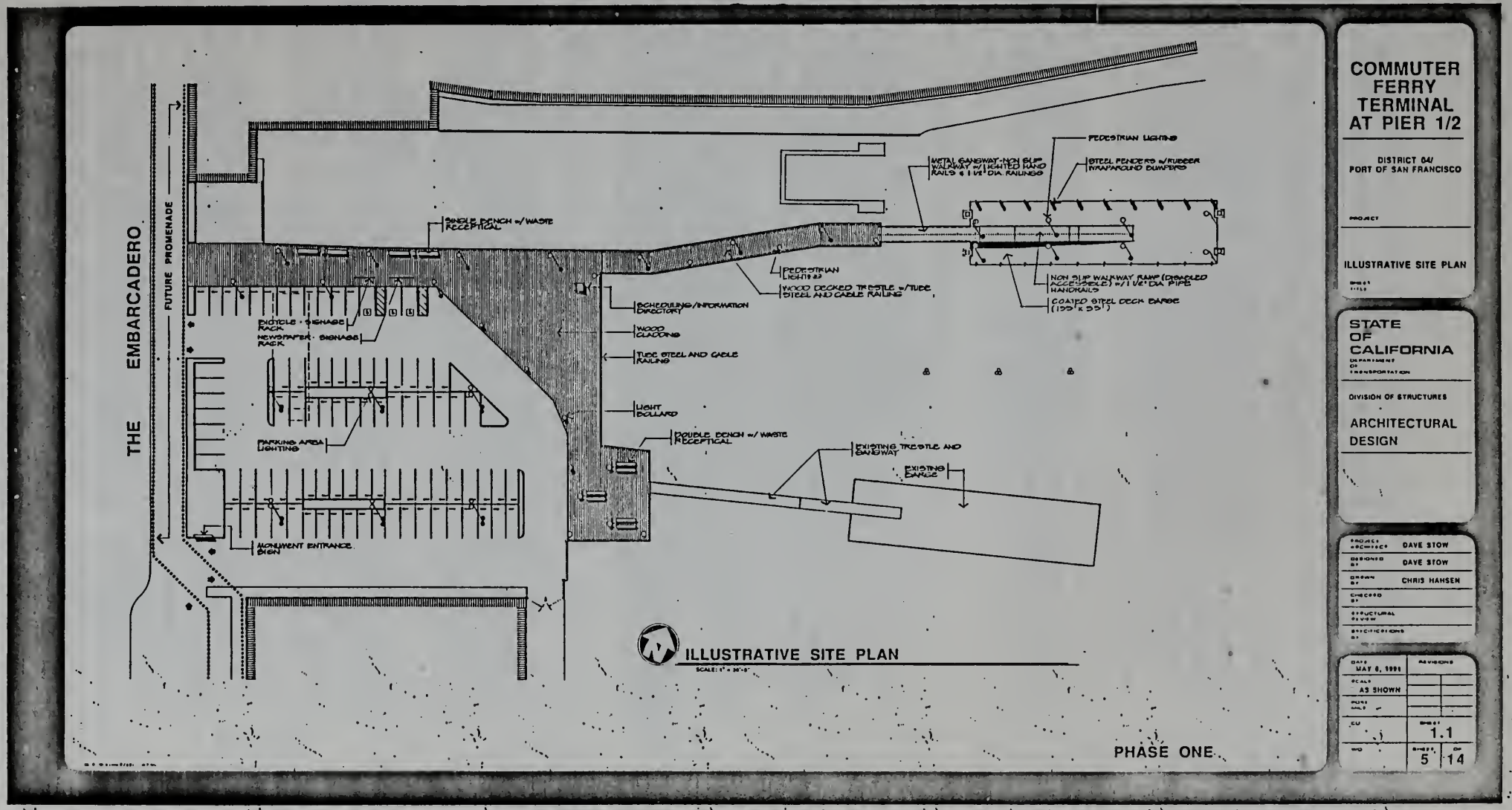
Golden Gate Ferry Terminal. The Golden Gate Terminal, on the other hand, received satisfactory marks for both passenger comfort and accessibility in the SF Bay Area Ferry Plan.

However, the Ferry Plaza, the foundation system of the Golden Gate Terminal, experienced some limited structural damage in the 1989 earthquake. The Plaza batter piles sheered away from its connection to the support beams causing failure in the decking in some areas. Repair work on the Plaza is the subject of negotiations between the Port and the Federal Emergency Management Agency (FEMA).

Overall 'Ferry Basin' Configuration and Capacity.

With the planned additions to Pier 1/2 and the projected increase in the number of runs per vessel (recommended in the SF Bay Area Ferry Plan), there are on-going concerns about the capacity of the 'ferry

Diagram #2 -- Pier 1/2 Ferry Terminal Up-grade (Phase I)



basin' (between the Ferry Plaza and the southside of Pier 1). In granting the Golden Gate Bridge District its license/lease to develop a private terminal, the Port gave the District exclusive first right of refusal for any ferry operations within a 600 foot radius of the center line of the Ferry Building. This review right was given, presumably, to decrease vessel traffic conflicts near the Golden Gate Terminal. With the planned addition of a second landing barge in the basin and additional vessel runs to San Francisco, the flows of traffic and capacity of the basin will have to be carefully monitored to insure proper vessel timing and maneuvering during peak hours.

Implications for San Francisco.

1. Expansion of service possibilities.

With the adoption of such significant legislation as Proposition 116 (the Clean Air Implementation Act) and the Intermodal Surface Transportation Infrastructure Act of 1991 (H.R. 2950), the potential for additional ferry runs to the Ferry Building area is more probable. The probability of expansion, however, depends to a great extent on maintaining and enhancing operational subsidies. As discussed in Section III, operational revenues have been a problem for such services as Alameda/Oakland, and Vallejo, with subsidies required by local and regional governments. Given the uncertainty associated with subsidies and ridership, the Port has taken a position that further capital investment in landing facilities can only be undertaken if grants are secured from outside sources.

2. Terminal Size and Need for Universal Access at the Ferry Building.

In the past, the Port has granted individual operators an opportunity to lease portions of the waterfront around the Ferry Building for installation of privately-controlled landing facilities. The operators were allowed exclusive landing rights at their facilities, forcing other operators and communities wanting commuter service to negotiate landing rights with operators holding leases.

This type of arrangement has become impractical for several reasons:

> there is not enough waterside area (landing and operating space) for all the probable operators to run independent facilities near the Ferry Building,

> Private operators at the Ferry Building have often set landing fees that were too high to encourage new commuter oriented service.

With grants from various state and regional transportation agencies and a sacrifice of revenue by the Port from elimination of tenant spaces, the Port has embarked on a terminal up-grade program at Pier 1/2 which will result in a publicly operated, universally accessible terminal. Consistent with the recommendations of the SF Bay Area Ferry Plan on "hubbing" (allowing passengers to transfer from one vessel to another with limited waiting), the project will provide physical connections between Pier 1/2 and the Golden Gate Ferry Terminal. The two phases of improvements to the terminal should be

sufficient to handle the increase in vessel traffic projected by the Regional Plan over the next 10 years.

3. Lease Arrangements to be Modified.

After the improvements are completed at Pier 1/2, the Port will negotiate landing agreements with the operators for timed slots on the barges during commute hours. Commuter landing fees (landings during peak commute hours) will be based on the annual maintenance and operational costs associated with the new terminal. Off-peak, or non-commute landings at Pier 1/2 may afford the Port, through negotiated agreements with various operators, an opportunity to generate additional revenue.

4. Need for Additional Water Dependent Support Space .

From the above descriptions of existing operations, it is clear that as operators come on-line, or expand the number of vessels they operate, additional stringer and ancillary space may be necessary for storage, and vessel repair. The extent to which this support space must be provided in San Francisco deserves further analysis.

V. Summary

In conclusion, the commuter ferry industry on San Francisco Bay is a hybrid industry consisting of both public and private operators. And in both capacities, the industry depends to a large extent (on the average 35-40%) on public resources for subsidizing its operating costs. Given projected budget deficits for many of the governmental agencies providing subsidy to the industry, the continuing availability of funds to support the ferry operations is not certain.

Given this uncertainty, the Port of San Francisco has taken a position of using only public grants to build additional landing and terminal facilities in San Francisco. The Port has chosen to locate these facilities at Pier 1/2, close to the existing Golden Gate Terminal and in close proximity to Market Street and the many different transit systems in the area. By expanding the landing facilities at Pier 1/2, the Port of San Francisco supports the goals and objectives of MTC's SF Bay Area Ferry Plan which predicts a modest increase in the number and frequency of ferry runs to the Ferry Building area.

The following questions summarize the issues associated with the operation and development of commuter ferry facilities that must be addressed as part of the land use planning effort.

Questions for the Advisory Board

1. Are there any trends in the Bay Area commuter ferry industry that indicate that the proposed terminal improvements at Pier 1/2 will not be adequate for the industry needs and more land should be reserved for ferry operations? What are the risks of doing so, given the dependency of the industry on public subsidies ?

2. Are there recent trends or developments in the commuter ferry industry, or transportation in general, that indicate a need to revise the projections of the MTC SF Area Ferry Plan (a 30-35% increase in passengers in the next 10 years) ?

3. What are the opportunities for incorporating public access at the existing and future ferry terminal facilities?

4. What is the desirability of incorporating commercial uses into commuter ferry terminal to provide for passenger amenities and to produce additional revenue to offset the operational costs of the terminal facility ?

5. How compatible are commuter and recreational ferry operations ? Can both operations be accommodated at the same terminal ?

6. Given other factors outside the Port's control, such as the industry's need for operational subsidies and improved parking and mass transit connections on both ends of the ferry run, how should the Port approach land use allocation decisions for the commuter ferry industry ?

Questions for Industry Experts.

1. Will commuter demand for ferry service continue to grow as projected in the MTC Regional Ferry Study ?

2. What is the likelihood that annual operational subsidizes will continue to be available by various local and regional governmental agencies given projected budget deficits? If subsidizes decrease substantially, will commuter ferries continue to be a viable form of mass transportation on the Bay ?

3. What percentage of overall operating costs must be subsidized in order for your fleet to provide on-going service ? At what point of occupancy (per vessel) can your service break-even, or provide a non-subsidized trip ?

4. Given the projected increase in landings and number of vessels at the Ferry Building during commute hours, will the Ferry Basin (Ferry Plaza to Pier 1) become too congested ? What would be a viable alternative, given the uncertainty of future growth in the industry ?

5. If you could design an ideal terminal, what would you include as improvements in the facility? What type of passenger amenities, would be desirable ?

6. What type of support services does the commuter ferry industry need ? Is there sufficient space and accommodations in San Francisco? Would operators be able to pay market rent for support space ?

7. What other land use activities are compatible with the operations of the ferry industry that might produce enough revenue to offset ferry costs ? Any Commercial facilities ? Any additional waterside activities ? Can commuter and recreational ferries use the same terminal ?

8. To what extent does the connection to other forms of transportation (either parking for private automobiles or mass transit) on either end of the commute run play a role in the amount of passengers using the ferry ?

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PORT OF SAN FRANCISCO
SAN FRANCISCO PORT COMMISSION
WATERFRONT PLAN ADVISORY BOARD

STATEMENT OF FACTS AND ISSUES AS TO THE LAND USE REQUIREMENTS OF THE CONTAINER SHIPPING INDUSTRY

(Revised 6/2/92)

The following material provides a brief statement of the facts and issues relating to the land use requirements of the Container Shipping Industry, and related support services, as identified in the profile report and in workshops with industry representatives.

I. FACTS AND ISSUES RELATED TO THE ADEQUACY OF CURRENT LAND AND FACILITIES TO MEET FUTURE INDUSTRY NEEDS

- Based on the 1988 BCDC/MTC Seaport Plan projections of a four fold increase in container cargo over the next 20 years, there is a high probability that additional land will have to be devoted to this use.

- The Port currently has about 185 acres in active use by the container shipping industry (excluding off-terminal container support services such as warehousing). The Port also has reserved over 100 acres of vacant land in close proximity to the existing container terminals (adjacent to Piers 80 and 96), which should satisfy much of the demand for terminal space within a 20 year horizon. The Port may also have to set aside land for cargo related support services to support that container shipping growth, if the land and facility requirements of those services are not provided for off Port property.

- The Seaport Plan policies provide that the Port should designate land between Piers 70 and 80, in addition to the 100 plus acres already reserved, for development of additional marine terminal capacity, in order to reduce the need for filling elsewhere in the Bay. The Seaport Plan presumed the availability of regional financing to accomplish its goals.

- The exact number of acres required to accommodate projected container cargo volume can not be determined without specific information about future: (1) carrier needs, (2) tonnage levels, (3) local/intermodal split, and (4) technogical and facility improvements implemented to improve throughput capacity at container cargo terminals.

- The key factors that determine if the growth of container cargo volume at the Port will achieve the forecasted four-fold increase, and thus realize the anticipated demand for land, depend upon the availability of funds for capital improvements, particularly the completion of the tunnel project and related rail line improvements necessary to intermodal growth, the ability to resolve the dredged material disposal controversy in a financially feasible manner, and a sufficient supply of support service providers essential to the marketability of the Port.

- The consensus among industry representatives is that currently planned yard, gate and crane improvements would enable existing terminals to accommodate growth in container shipping for local markets and therefore should be a priority. If the tunnel improvements are built (thus increasing the Port's ability to compete for cross-country container transport) and cargo increases occur as projected, then the improvements to existing terminals would not only be essential, but also new terminal development and transportation access improvements would be required.

- Industry representatives also agreed that a long lead time (7-10 years) was required to develop new terminal facilities or berths, and that ports must take the lead role in the development process even if the industry ultimately agrees to invest directly in the development.

- The closing of I-280 access, and the planned modifications along the Embarcadero have adversely affected the competitiveness of the Port, but are assumed to be temporary set backs. Cargo support services have adjusted to traffic congestion, in part, by trucking goods at off-peak hours.

- Displacement of cargo support service businesses currently located in Mission Bay, and increasing demand for services associated with growth in the industry, create additional demand for Port land.

II. IMPLICATIONS OF REGULATORY AND ENVIRONMENTAL ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The regulatory and environmental issues with the greatest potential impact on the container shipping industry's demand for additional Port land are : (1) resolution of the dredge disposal problem in a financially feasible manner, (2) enactment of land use policy and zoning regulations of City and Regional agencies to ensure preservation of industrial land, or provision of new industrial land at the Naval Shipyard, for container cargo related uses (which would need to maintain rail access).

III. IMPLICATIONS OF FINANCIAL AND ECONOMIC ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- Container shipping is a capital intensive industry. Capital funding necessary to accommodate future growth is roughly estimated as follows (in millions):

Funded improvements to existing terminals	$ 8.5
Planned improvements to existing terminals	30.0
Tunnel and Rail Bridge improvements	22.0
Purchase Additional Property at Pier 80	3.5
Develop 100 acre reserve as terminal *(w/o berths assume $450,000 per acre)*	45.0
Develop 3 new berths per Seaport Plan *(assume $40 million per berth; these 3 berths would be located on the 100 acre reserve)*	120.0

Develop 3 new berths per Seaport Plan	120.0
(assume $40 million per berth; these 3 berths would require development of Warm Water Cove, the land and development costs for which are unknown if pursued)	
Off-Port transportation improvements	40.5
(assumes State and Federal Funding)	

- The need for additional land is contingent upon the availabilty of funding to develop the facilities necessary to accommodate future growth. Possible sources of funds include: (1) Port of San Francisco revenue based bonds, (2) Private investment, (3) State or Federal grant funding, and/or (4) City or Regional tax supported funding.

- The Port usually can not attract substantial new revenue from container shipping without developing additional land. To do that, investment to develop additional land would be required years in advance of new revenue generation activity.

- As of 1986, shipping services were estimated to account directly for approximately 2000 jobs, with a payroll of over $50 million, and tax payments to the City of $783,000 annually.

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CONTAINER SHIPPING INDUSTRY PROFILE

I. INTRODUCTION:

This profile of the Container Shipping Industry includes the following components:

° General market trends for the Container Shipping Industry are presented, including a discussion of the factors that may affect those trends, and the implications for the Port of San Francisco.

° Regulatory issues and environmental implications associated with growth of the Container Shipping Industry are identified, such as compliance with the Seaport Plan, dredging and disposal of dredged material and policies governing, and opportunities for improving, public access. Environmental issues, and the process for review and analysis of those issues, will be addressed.

° Financial and economic issues are discussed to the extent pertinent to Port of San Francisco decision making.

° The various land uses currently associated with the Container Shipping Industry, principally the container terminals at Piers 80 and 94-96, are described. The condition of existing Container Shipping Industry facilities, and the suitability of those facilities to support current usage and future growth, is also discussed.

° The issues associated with the operation and development of the Container Shipping Industry that must be addressed as part of the land use planning effort will be summarized. In addition, a list of questions that the Advisory Board members may want to pose to industry representatives is attached.

II. TRENDS AND FORECASTS FOR THE CONTAINER SHIPPING INDUSTRY:

A. Recent History of Container Shipping Industry

The containerization of cargo is a relatively recent innovation in maritime trade. On the West Coast, Matson Lines introduced the first regular container service in the late 1950's. Within thirty years, all of the larger Pacific liners trades have become completely containerized, and smaller trades, such as those with South America, are upgrading to containerized operations.

In addition to the trend toward containerization of cargo, two other developments in maritime trade have had a profound effect on West Coast ports: (1) increasing trade between the U.S. and Pacific Rim countries, and (2) increasing use of the land-bridge concept, where Pacific Rim containerized cargo bound to and from the Eastern U.S. is shipped through West Coast ports, and transferred to rail as opposed to traveling East by water through the Panama Canal.

As a result of these developments, in combination with recent high West Coast population growth, the share of total U.S. liner trade captured by West Coast ports grew from 28.2 % in 1976 to 42.8% in 1985, and is expected to continue to increase.

B. Growth Forecasts for Container Shipping in the Bay Area

The Bay Conservation and Development Commission (BCDC) and the Metropolitan Transportation Commission (MTC) undertook a regional seaport planning effort which led to the adoption of the San Francisco Bay Area Seaport Plan in 1982. The Seaport Plan was amended in 1989. In preparing the Seaport Plan, and the 1989 amendments, BCDC and MTC commissioned a growth forecast for cargo trade in the Bay Area. (See Table 1, Bay Area Containerized Cargo Forecast.) Forecasts for the San Francisco Bay Area ports for 1990 through the year 2010 project that containerizable dry cargo will increase to more than four times its present volume (from 7,773,000 metric tons to 32,567,000 metric tons).[2]

Obviously, a quadrupling in container cargo volume within twenty years has significant implications for land use planning at Bay Area ports. The provisions of the Seaport Plan will be discussed further in Section III, which addresses regulatory issues, and Section V, which addresses San Francisco's marine terminal sites.

The Seaport Plan forecast and related land use requirements derive from a model which incorporates numerous assumptions about economic conditions and the container shipping industry. The demand for new terminals was computed by determining how much of the forecasted growth could be accommodated at existing marine terminals, and dividing the remainder by the average terminal capacity per berth. The average capacity figure was adjusted for projected changes in container shipping and productivity. The Seaport Plan recognizes a need to reexamine the assumptions periodically to assess the validity of the forecasts. However, even if the forecast model continues to be valid at a regional level, the assumptions incorporated may not reflect local conditions and operations found at the Port of San Francisco.

The following material identifies some of the industry trends and other factors that may affect cargo growth and the demand for additional capacity at marine terminals in San Francisco. These trends will be discussed with industry representatives at the

Waterfront Plan Advisory Board session on the Container Shipping Industry in an effort to elicit insights and informed opinions about the implications for the Port of San Francisco.

Container Shipping Industry Trends:

1. **Improvement in Shipping Line Profitability**

   If the profitability of shipping carriers under contract with the Port of San Francisco improves, and the carriers grow with the trade, they will bring more cargo through the Port. Recent trends show improvement in the profitability of shipping lines in general which over time could lead to increased demand for land for marine terminal development.

2. **Rationalization/Consortia**

   This factor involves changes in the relationships between carriers, either by contract or through merger and acquisitions, to improve the frequency and efficiency of service. The Port of San Francisco could experience either large gains, or large losses, in container cargo if this developing trend changes the way the Port's shipping lines do business. In general, rationalization can lead to more efficient utilization of terminal space because cargo service is more frequent. However, because cargo service is more efficient, the shipping lines that rationalize their services attract greater cargo and thus may accelerate the demand for marine terminal facilities, at least until all shipping lines adopt similar approaches. The impact on the Port will be determined by specific circumstances affecting specific carriers.

3. **Technological Advances in Trading Partner's Infrastructure**

   A worldwide trend towards containerization among less developed countries, and improvements in container shipping technology generally, should lead to growth in container cargo. However, as the infrastructure to handle container shipments improves in Central America, the Port could experience competition from Central American ports for transhipment service for transpacific and South American routes.

4. **Local/Intermodal Cargo Mix**

   As growth in intermodal cargo begins to affect the mix of intermodal and local cargo, then demand for marine terminal land decreases because intermodal containers move through

the terminal more quickly on trains, than on trucks. However, the growth potential for intermodal cargo is high, and thus, growth in intermodal cargo would ultimately accelerate the demand for terminal facilities at the Port.

5. Preferential Assignment of Terminals To Carriers

There is a developing trend among large carriers to own or control their own marine terminal. While preferential assignment may attract more cargo to that particular shipping line, the Port would have to compensate by providing other terminal space to accommodate the smaller shipping services displaced from a dedicated terminal.

6. Large Vessels

The trend toward development of longer container ships will increase the demand for marine terminal space in order to accommodate the large volume of cargo delivered at one time. In addition, these larger ships require longer berths, and possibly more container cranes.

7. Modernization of Terminal Operations

There are a number of trends that could affect the throughput capacity of terminal yards. One trend, toward "wheeled operation" involves the transfer of a container from a ship directly onto a truck chassis to expedite transport of the container. Increased demand for wheeled operations would increase the demand for terminal space because current "grounded operations" allow stacking of containers. Other technological advances, such as a system called "Computainer," a high rise computer controlled mechanized warehouse, could lead to greater intensity of terminal space if demand for land increased enough to justify the higher capital investment in such a structure. In Hong Kong, for example, demand for land is high enough to justify construction of high rise parking garages for containers stored on truck chassis.

In addition, solutions to the problem of storage of empty containers, possibly at inland depots and distribution sites, could free up container yard space for full containers.

8. Load Centers

Steamship lines are building larger ships and are decreasing the number of ports that they call. Ports that are not

called direct by vessel are served intermodally (e.g. by truck/train.) The load center concept will benefit the Ports with best intermodal connections and local markets, increasing their need for container yard space. The ports not served directly by "all-water" service lose any opportunity for true intermodal volumes, lessening the need for terminal and berth space.

9. **Labor Issues**

The current labor contract with the ILWU tends to limit around-the-clock operation which reduces productivity. More liberal work rules would allow greater throughput at terminals, decreasing pressure for additional terminal space.

10. **Just In Time**

This concept in inventory control utilizes the transport mode (ship/truck/train) as the warehouse for the consignee. It can have a variable effect on terminal capacity, depending upon the operation of the consignee. If the consignee uses only the ship as "storage" then the "just in time" trend would result in cargo moving through the terminal more quickly. If the consignee also uses the terminal yard to store containers until the time they are needed by the end user, then demand for terminal yard space would increase. Ports can influence this trend to a certain extent by revising tariffs and charging more for storage of containers, delays etc.

11. **Information Technology**

Breakthroughs in terminal automation (gate technology, yard inventory etc.) will quicken cargo throughput, lessening the need for additional terminal space.

TABLE 1

San Francisco Bay Area Containerizable Cargo Forecast

The Seaport Plan was updated in 1989, and as part of that effort the BCDC and MTC commissioned Manalytics, Inc. to prepare a report entitled "San Francisco Bay Area Cargo Forecast to 2020 and the Future Demand for Marine Cargo Terminals." That report concluded that Bay Area containerizable cargo (both imports and exports) will grow from 546,000 TEUs (Twenty Foot Equivalent Units) in 1987 to almost 3 million TEUs by 2020. The forecast, in metric tonnes, is shown below:

NINE COUNTY BAY AREA FORECAST

(1000's metric tonnes)

	1990	2000	2010	2020
Foreign Containers	6,657	12,844	20,232	29,888
Domestic Containers	1,116	1,490	1,995	2,679

[Note that the Port of Oakland recently compared the forecast for 1990 against actual container volume for foreign container traffic. The forecast, at 6,657,000 metric tonnes was slightly lower than the actual volume for 1990 which was 6,708,000 metric tonnes.]

C. Implications of Container Cargo Growth Forecasts for the Port of San Francisco

The Port of San Francicso's recent experience reflects the growth trend in containerized cargo. In 1987, the Port of San Francisco accounted for 18% of Bay Area Imports and 15% of Bay Area Exports. Of the total liner trade at Bay Area ports in 1987, the Port of San Francisco had 16%. By the first half of 1991, the Port's share of Bay Area trade had grown to 24%.

From 1983 to 1991 the volume of containerized cargo has increased from 70,746 TEUs to 185,796 TEUs at the Port. (A TEU is a twenty foot equivalent unit which is a unit of measurement that standardizes for different container sizes.) Also, between 1983 and 1991 the percentage of cargo tonnage moving through the Port in containers increased from 60% to 96%, reflecting the growing importance of container cargo trade to the Port of San Francisco. Recent growth is primarily attributable to the introduction of transhipment service by Nedlloyd Lines at the Port's North Container Terminal, and growth of the transpacific services using the South Container Terminal.

The amount of the growth forecast for container cargo trade in the region that the Port of San Francisco can attract and accommodate is dependent upon a number of variables. Some of the key variables include shipping line operations, actions by regulatory agencies, (particularly with respect to disposal of dredged material), availability of capital to meet infrastructure requirements, and ability to increase productivity at existing marine terminals. Although all of these variables can be influenced by the Port of San Francisco, few are within the Port's ability to control.

There is one critical factor that is at least substantially within the Port's power to control. It is generally understood that before the Port can fully realize a significant share of the regional growth forecast, it must develop the ability to offer intermodal rail service for double stacked containers directly from Port terminals.

Although most cargo shipped through Bay Area ports is now bound for local markets, the potential for growth is greater for cargo shipped through West Coast ports to and from inland U.S. destinations. The economics of intermodal service favor ports that have the capability to allow containers to be double stacked on rail cars directly off the ship. Currently, containers coming through the Port of San Francisco can be transported via double stacked rail cars only if both of the containers are 8 feet 6 inches high, and even then that height allows less than the standard safety clearance. The growth potential for rail-oriented cargo lies in the capability to transport two 9 foot 6 inch stacked containers.

The Port's ability to offer double stacked service for 9 foot 6 inch containers is constrained by the height of two rail tunnels along the Southern Pacific mainline that serves San Francisco. In

January 1989, a container forecast specific to the Port of San Francisco was prepared by Manalytics, Inc. as part of an analysis of the benefits to the Port from improved rail tunnel clearances. That study concluded that without the improvement to tunnel clearances the Port of San Francisco would lose market share and revenue.

Although actual cargo volumes for 1990 were much higher than the amount projected in the tunnel project study, the analysis and conclusions are still valid with respect to the Port's ability to capture forecasted growth in the absence of double stacked intermodal capability. At the time the study was done, the Port's contract with Nedlloyd Lines to serve as a major transhipment hub was not foreseen. Because transhipment service principally involves the transfer of containers between two Nedlloyd ships bound from and to different Pacific and South American ports, the Port was able to increase its cargo volume without improving its intermodal service.

Port funds have been allocated for the tunnel improvement project, and engineering work is already complete. Project implementation can not begin until negotiations are completed with Southern Pacific Railroad and the Joint Powers Board. Once negotiations are concluded, the tunnel project will take approximately 14 months to complete. If San Francisco completes the rail project the Port will have an advantage over other ports, such as Los Angeles/Long Beach, by offering direct double stack access on dock.

Although the inability to offer easy access to double stacked intermodal service is a significant impediment to growth in container cargo volume at the Port of San Francisco, it is not the only factor that will determine the future of the Container Shipping Industry at the Port.

The following sections address regulatory and environmental issues, financial and economic issues, and the condition of local facilities and support services which, when taken together, will determine how the Port will respond to the growth potential of the Container Shipping Industry.

TABLE 2

Port of San Francisco Containerizable Cargo Forecast

The following forecast assumes that the Port will complete the tunnel project, and make other necessary improvements to existing terminals to improve capacity. It does not assume that San Francisco will attract discretionary containers diverted from a competing port region (i.e. increasing the Port's market share) although that is a possibility if the tunnel project is completed.

This forecast does not reflect the growth in container cargo volume associated with the new transhipment service at the Port. However, a comparison of the 1990 forecasted volume and the actual 1990 volume at the Port after subtracting the cargo attributable to transhipment service, shows that the forecast is on target. Assuming that the tunnel project is completed, and assuming the development of available capacity at Port container terminals, the consultant's baseline forecast is nevertheless relevant for showing potential growth in non-transhipment based container cargo trade.

PORT OF SAN FRANCISCO CONTAINERIZABLE CARGO FORECAST
(in TEU's)

	1990		2000	2010
	(Forecast)	(Actual Minus Transhipment Volume)		
Imports	46,100	48,200	66,938	97,196
Exports	47,491	50,900	95,182	190,768
Total	93,591	99,100	162,120	287,964

NOTE: Actual total container volume in 1991 was 185,796 TEUs. The increase over the 1990 forecast reflects the transhipment service cargo. If the Port continued transhipment service at the current volume over the long term, the projected volume for the year 2000 would be 246,816 TEUs, and 372,660 TEUs for the year 2010.

[Table based on forecasts prepared by Manalytics, Inc., as part of the report entitled "Benefits From Improved Railroad Tunnel Clearances", January, 1989.]

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III. REGULATORY AND ENVIRONMENTAL ISSUES

A. Regulatory Issues:

For purpose of the Port's land use planning effort, the principal regulatory issues associated with the operation and growth of the Container Shipping Industry are:
(1) Compliance with the Seaport Plan, (2) regulation of dredging, and (3) the provision of public access.

1. The Seaport Plan

The Seaport Plan was adopted by the BCDC and MTC in 1982 in response to State law mandates for those agencies. That planning effort was undertaken to identify long range regional demand for marine terminal sites, to review existing marine terminal capacity, and to reserve future expansion sites on a near term and long term basis in order to minimize Bay fill and adverse environmental consequences of future terminal development.

The objective of the Seaport Plan was to identify both near-term and long-term marine terminal development sites that would accommodate forecast demand and minimize the need for Bay fill and other adverse environmental impacts. The Seaport Plan designates future marine terminal sites and recommends that adjacent bayshore land be reserved for uses related to the transfer of cargo.
The Seaport Plan forecast makes certain assumptions about the ability of Bay Area ports to compete with other West Coast ports for container cargo. However, the process of selecting future marine terminal sites did not consider competition among Bay Area ports, nor whether a given port has the financial resources necessary to implement the Plan.

The Seaport Plan policies, and specifically the land use designations for Port of San Francisco property, are deserving of serious consideration in the Port's land use planning process. The 1982 Seaport Plan set aside four near-term development sites and one long-term development site on the San Francisco waterfront. (See Map 2, showing the Seaport Plan designations for Port of San Franciso property.) The designated near-term sites included:

(1) Piers 52 to 64, (46 to 96 acres, 2 to 5 container berths),

(2) Pier 70, (62 acres, 2 container berths and 2 non-container berths),

(3) Western Pacific RR Ferry Slip, (40 acres, 1 container berth), and

(4) Pier 94 North, (47 acres, 2 container berths).

In 1989, in a response to a request from the Port of San Francisco, BCDC and MTC agreed to revise the Seaport Plan to delete the near-term designation of Piers 52 to 64, and designate the area between Piers 70 and 80 as a near-term narine terminal site instead, if (1) all of the former Western Pacific property at Warm Water Cove is transferred from the Santa Fe Pacific Realty Corp (now Catellus Corp.) to the Port, and (2) the Port and the City develop a strategy, to be reviewed and approved by or on behalf of the BCDC, to ensure that port priority use areas are reserved for port purposes consistent with the Seaport Plan, and the non-port-owned areas needed for marine terminal uses at the Piers 70 to 80 area are available to the Port. A map showing the configuration of the marine terminals assuming the revisions to the Seaport Plan is included at the end of this report.

One final issue of note regarding the ability of San Francisco to accommodate forecast demand for container terminal capacity, although it is beyond the scope of the Port's land use planning effort, is the possibility for developing container terminals at the Hunter's Point Naval Shipyard.

The Seaport Plan provides that Hunter's Point Naval Shipyard, if and when no longer needed by the military, are reserved for Port Priority Uses. Permitted uses include marine terminals, and directly-related ancillary activities such as container freight stations, transit sheds and other temporary storage, ship repairing, support transportation uses including trucking and railroad yards, freight forwarders, related government offices, chandlers and marine services.

The City has begun a planning process for the Hunter's Point Naval Shipyard and a Citizens Advisory Committee has been appointed to oversee that process. Consideration will be given to marine terminal and other maritime uses as part of that planning process.

2. Regulation of Dredging

The regulatory issue which has the greatest potential to profoundly affect the future operations and development of the Container Shipping Industry in the Bay Area is the regulation of shipping channel dredging. Dredging is necessary to remove siltation and maintain existing channel depth. Permission to dredge may also be sought to deepen channel depth at new terminal sites or to accommodate deeper draft ships at existing terminals. The environmental issues vary to a degree depending upon the purpose for which a dredging permit is sought. However, the current controversy over the environmental impacts of disposing of dredged material has implications for both maintenance dredging as well as dredging to increase channel depth.

The Port of San Francisco's principal concern is with maintenance dredging. Shipping channels and ship berths are subject to sedimentation. One report estimates that approximately seven million cubic yards of material is removed from the Bay region's shipping channels each year. (Beeman & Associates, Benefits Related to Navigation Channel Maintenance, June 1990.)

The Port must dredge 150,000 cubic yards on average annually in order to maintain shipping channels and berth depths at Piers 80, 94 and 96. At a cost of between $2.00 and $3.00 per cubic yard, the Port's dredging cost at the container terminals has been approximately $300,000 to $450,000 per year. Due to the controversy over the disposal of dredge materials near Alcatraz, there is a potential for dramatic increases in dredging costs. A range of disposal options are being examined, including open ocean disposal and land disposal, and the ultimate solution may include a mixture of the different alternatives. Land disposal is the most expensive, costing in excess of $20.00 per cubic yard. A worst case scenario would be if all of the dredged material from the Port's container terminals each year had to be transported to an upland location for disposal. Under that scenario the cost to the Port to keep its container terminals open could rise to $3 million each year.

To address the issue of disposal of dredged material, regulatory agencies, including EPA, BCDC and the Regional Water Quality Control Board, are participating in a cooperative effort convened by the U.S. Army Corp of Engineers to establish a twenty five year plan for dredging. This Long Term Management Strategy (LTMS) will include an analysis of overall dredging requirements and environmental concerns, leading to selection of disposal sites. The LTMS involves a two phase study process, with actual implementation expected in 1994.

3. Public Access.

Providing public access along the San Francisco waterfront is a principal policy objective of the BCDC, and furthers the public trust under which the Port holds title to waterfront property. Incorporating public access at marine terminal locations can present safety problems, however, and is supported by BCDC only to the extent that it would not interfere with operational efficiency at marine terminals. The Port is committed to development of policies for enhancing public access opportunities, to the extent feasible, as part of future marine terminal improvements. The issues attendant to incorporating public access at such sites will be discussed with industry representatives at the Advisory Board session on the Container Shipping Industry.

The Port of San Francisco has developed a plan for improving public access in the vicinity of its marine terminals by developing public open space at Pier 98. That project was described at a previous Advisory Board meeting, and a written description of the project is available upon request.

B. Environmental Issues:

There are several relatively recent Environmental Impact Reports (EIR) that evaluate the environmental implications of increased container cargo activity: (1) the Final EIR on San Francisco Container Terminal Modernization completed in January, 1986, and its Supplement, completed in December, 1986, and (2) the Final EIR on the Seaport Plan and the Supplemental EIR on the 1988 Revisions to the Seaport Plan.

The environmental analysis of the Port's Terminal Modernization Program contains a detailed analysis of proposed improvements to the Port's active terminals, most notably improvements that would foster increased intermodal container cargo handling, including a new rail and truck bridge across Islais Creek to link the North and South Terminals. The Seaport Plan EIRs examine environmental impacts in a more regional context, and over a longer time line. These EIRs are public documents, available for review at the Port, BCDC and MTC, and therefore, this report will not attempt to summarize all of the conclusions of those documents.

Potential environmental impacts that were discussed in detail in the San Francisco EIRs include:

Impacts associated with increase rail traffic, such as train noise, and train interference with vehicular traffic, particularly emergency vehicles along Third Street, Jerrold Avenue, and Evans Avenue, as well as in the Peninsula Rail Corridor.

Impacts resulting from increased truck traffic, and employee vehicle trips, particularly along Third Street and at freeway on- and off-ramps.

Air quality impacts associated with increased truck trips and cargo handling equipment.

Biological impacts associated with dredging and Bay fill, particularly if those activities occurred during spawning season, and "off-site" impacts associated with disposal of dredged material.

Impacts associated with displaced businesses as a result of container terminal expansion.

Environmental impacts analyzed in the Seaport Plan EIRs of particular concern include the significant unavoidable adverse impacts from the loss of the surface and volume waters of the Bay, and the loss of habitats, due to Bay filling. For example, implementation of the Seaport Plan near term marine terminals in San Francisco would require 21 acres of additonal Bay fill, including filling in Warm Water Cove.

An EIR will be prepared as part of the waterfront land use planning process. Environmental issues associated with container terminal operations and development will be analyzed in that document. The Waterfront Plan EIR will present an opportunity to further examine environmental issues associated with container terminal development, such as potential impacts on emerging marine habitats due to expansion on existing terminal sites. Preparation of the Waterfront Plan EIR will begin with a scoping process to identify the full range of potential environmental impacts to be analyzed.

Environmental impacts associated with other non-maritime development in the Bay Area also have implications for the future prospects of the Container Shipping Industry in San Francisco. For example, traffic congestion on the regional and local freeway system affects the efficiency of terminal operations. In additon, development pressure on industrial sites in the vicinity of the Port may result in displacement of the industrial support services to shipping lines and terminal operators.

C. Implications for the Port of San Francisco:

The regulatory and environmental issues identified above have significant implications for the future of the Container Shipping Industry at the Port of San Francisco. Although there is support for marine terminal development from regulatory agencies, such as BCDC and MTC, there is little financial support to implement the objectives of the regulatory agencies. Moreover, with respect to regulation of dredging, policies of certain regulatory agencies could result in a substantial cost increase for marine terminal operations in the Bay Area.

With respect to implementation of the Seaport Plan, the Port Commission has not formally endorsed the Seaport Plan. Current City land use plans and zoning designations provide for industrial land use in the area covered by the Seaport Plan, however, these local regulations do not limit industrial uses to those identified as Port Priority Uses in the Seaport Plan. In order for the 1989 revisions to the Seaport Plan to be effective, the Port must develop a strategy, acceptable to BCDC, to ensure that port priority use areas are reserved consistent with the Seaport Plan. Approval of that strategy is critical to the implementation of the Mission Bay project, and to the Port's acquisition of the Western Pacific lands at Pier 80.

If the Port wanted to designate land uses that were inconsistent with the designations in the Seaport Plan for Port property within BCDC's jurisdiction, BCDC and MTC would have to approve an amendment to the Seaport Plan in order for the land use designated to be realized. The Seaport Plan is scheduled to be updated, and revised if necessary, in 1994.

With respect to environmental impacts, some impacts such as those related to dredging, dredge disposal, and increased traffic, can theoretically be eliminated or mitigated to an acceptable level, but at a potentially high cost to the Port and the region. The Port of San Francisco and Bay Area ports must compete with other West Coast ports to attract shipping. Given the current sources of funding for container terminal development, there is a limit on how much additional cost Bay Area ports and/or the shipping lines can feasibly absorb and remain competitive. There are of course environmental issues that other ports must address, such as air quality impacts in Southern California. It remains to be seen how these issues will affect pricing policies and port revenues.

Other environmental impacts, such as those resulting from Bay fill required to provide additional marine terminal berths, are unavoidable. However, if the Seaport Plan is implemented, the forecast growth can be accommodated with the minimum feasible total amount of Bay fill.

If these issues are required to be resolved by individual Ports relying on existing revenue bases, then tradeoffs between environmental concerns and achieving economic growth through container shipping are inevitable. To the extent that the issues are identified and addressed in a broader regional, statewide or national context, then it is possible that the need for tradeoffs can be minimized or eliminated. In a larger context the economic benefits associated with container shipping industry can be more easily factored in to justify the higher costs of development and operation. Addressing the issue in a larger context would also allow more comprehensive consideration of adverse environmental consequences, for example consideration of impacts on air quality in Southern California if container shipping growth projected for the Bay Area can not be accommodated here.

Solutions to problems would also be easier to implement in a larger context. For example, it can be argued that the environmental issue surrounding disposal of dredged material would not be as problematic if water diversions from the Bay Delta were reduced. Similarly, the issue of whether or not San Francisco could or should amend its local regulations to implement the Seaport Plan is more easily resolved if one assumes, as did BCDC and MTC, that state or regional financing mechanisms would be created to develop marine terminal capacity in a manner that minimizes the need for Bay fill.

Although the Port of San Francisco can lobby for increased regional, state and federal participation in funding port development, the Port has had to make decisions as to land use and investment based on existing circumstances. The question presented in this current planning effort is whether land use decisions should be made based on existing conditions, or alternatively, assuming change in regulations and financing mechanisms.

IV. FINANCIAL AND ECONOMIC ISSUES

A. Financial Issues:

Given the tremendous level of growth forecast for container shipping, it is not surprising that the Seaport Plan concluded that more than one billion dollars would be necessary for investment in new marine terminal facilities to accommodate the increased cargo volume in the Bay Area. This level of investment in port related capital improvements is consistent with the experience of other West Coast ports. For example, the Port of Long Beach invested $400 million in capital expenditures over the past two years to accommodate growth, and expects to spend another $500 million by the end of fiscal 1993 on transportation, equipment and facilities construction and refurbishments.

The greatest impediment to increasing container shipping at the Port of San Francisco is not the growth potential of the industry, but rather the availability of funds for capital investment. As discussed in a prior Advisory Board meeting, the Port's draft capital improvement plan for all Port facilities totals $94 million, of which $79.2 million is unfunded. See the attached summary of proposed capital plan projects.

The Port has identified container terminal capital improvement projects to improve terminal capacity that would cost almost $60 million, not including the full development cost of land currently reserved, or being acquired, for terminal expansion. In addition to the capital improvement projects which the Port has identified to meet the needs of the container shipping industry, the Seaport Plan designated sites in San Francisco for development of six new container berths and related backlands. Unfortunately, the Plan does not include a funding component. Detailed cost estimates for implementing the Seaport Plan's provisions for development of near-term marine terminal sites at the Port are not available. However, assuming BCDC's estimate of $40 million per container berth, and given that the Seaport Plan provides for six new berths in San Francisco, the cost would be at least $240 million, exclusive of land acquisition costs for the area between Piers 70 and 80.

Possible sources of funds include: (1) Port revenue bonds, with payment secured by Port revenues or by a dedicated revenue stream from specific maritime or commercial uses; (2) Combine the Port with the Airport and/or Public Utilities Commission, similar to other port organizational structures, to allow port access to those revenue sources; (3) General obligation bonds, paid for by local property tax revenues; (4) Existing Federal/State transportation grants may be available to develop rail and highway facilities to serve container terminals; (5) New Federal/State funding sources for marine terminal development; (6) Direct investment by shipping lines in marine terminal facilities; (7) Direct investment by rail lines in transportation network facilities.

An assessment as to whether these funding sources could, or would, provide the capital necessary for marine terminal improvements is discussed in subsection C below.

B. Economic Impacts:

There is not a current, comprehensive analysis available of the economic impacts resulting solely from container shipping activity at the Port of San Francisco. There are, however, several studies that present useful information, albeit from a slightly different perspective. The conclusions of these studies relevant to container shipping are summarized below.

1. Port of San Francisco Economic Impact Report, prepared by Trade Information Planning Systems, September 1988.

This study involved estimating the economic impacts of all sectors of Port activity for the base year 1986 in terms of employment, payroll and revenues generated. The economic impacts associated with containerized shipping were encompassed within the sector entitled "Shipping Services." Shipping Services covered the full range of transportation services and related activities (such as pilot and tug operations, banking and insurance), as well as employment generated by port capital expenditures and industries that receive or ship a major share of cargo via Port of San Francisco facilities (such as coffee, newspaper and apparel manufacturing.) Some of the studies findings include:

(a) Shipping Services employed 1,957 FTEs (full time equivalent positions) in 1986, with a payroll of over $51 million, and direct revenues of $172 million.

(b) Shipping Services directly generated annual payroll and possessory interest taxes to the City of approximately $783,000 in 1986.

(c) In 1986, on average, every time a ship called at the Port it created approximately 7 full time jobs, with total City receipts of approximately $175,000.

(d) In 1986, every 1,000 metric revenue tons of cargo created one full time job with an average salary exceeding $29,000.

2. Benefits From Improved Railroad Tunnel Clearances, prepared by Manalytics Inc., January 1989.

This study analyzed the revenue and employment impacts associated with a proposed Port project that would improve clearance at two rail tunnels connecting Port facilities to the main line track, and thus permit intermodal transport via double

stacked container trains. The study compared potential revenue streams between 1991 and 2010, and the net present value of the projected revenue streams, assuming no project and then assuming various degrees of success in capturing container cargo growth if the tunnel project was implemented. The principal conclusions are as follows:

(a) If the tunnel project is not completed, major shipping lines would not renew their contracts with the Port, therefore, the Port would lose both rail-oriented and local-oriented business over the next twenty years. The net present value of the projected revenue stream to the Port between 1991 and 2010 would be only $23.3 million.

(b) If the tunnel project is completed, the Port could expect to capture local-oriented and rail-oriented container cargo growth , and thus the net present value of projected revenue streams from 1991 to 2010 ranged from $68.8 million to $77.3 million, depending upon the percentage of discretionary cargo it could attract from Southern California ports.

(c) The study analyzed employment impacts at stevedoring companies that operate the terminals, and measured impacts based on the assumption that 2000 hours per year per person equals one full time employee or FTE. If the tunnel project was not implemented, direct terminal employment would equal 276 FTE years overall from 1990 to 2010, whereas if the project is completed there would be 1236 FTE (including employment at the Intermodal Container Transfer Facility.)

3. Benefits Related to Navigation Channel Maintenance, San Francisco Bay Region, prepared by Ogden Beeman & Associates, Manalytics, Inc., June 1990.

This study examines economic activity dependent on deep and shallow draft navigation channels in the San Francisco Bay and Delta Region. The purpose of the study was to determine the potential impacts to the region associated with ceasing channel maintenance due to the effect such action would have on activities ranging from container shipping to recreational boating.

The study concluded that $5.4 billion of economic activity annually throughout the region is directly dependent on deep and shallow navigation channels. If channel maintenance ceased at the beginning of 1990, the region would lose $3.3 billion annually of deep draft cargo economic activity, and 1,422 jobs in the shipping industry, in addition to other impacts on U.S. Navy payroll and ferry operations.

One of the decisions confronting Port Staff is whether to commission a comprehensive economic impact analysis of shipping and water-dependent industries as part of the land use planning effort. Such information may be useful in resolving conflicts between industries competing for Port land and facilities. An economic impact analysis would also assist the Port in determining economic implications for the City resulting from alternative land use decisions, instead of simply assessing the direct revenue impacts for the Port.

C. Implications for the Port of San Francisco:

The Container Shipping Industry is a capital intensive industry requiring high cost, front end, investment in facilities and equipment. Although growth forecasts indicate that there is a strong potential for receiving a positive return on investment, given the possibility of changes in industry operations and in the regulation of environmental impacts, there is also significant risk of a negative return. A review of existing and possible future sources of funding for marine terminal development at the Port of San Francisco reveals that no single source of funding can be counted on to accommodate the future needs of the Container Shipping Industry.

A review of the Port's current financial condition shows that the Port can not fund the $240 million plus in capital improvements that ultimately will be necessary to meet the full marine terminal expansion plan provided for in the Seaport Plan. First, the Port must secure full funding for the $60 million, or more, in capital improvements planned to increase the capacity of the existing terminals. Whether or not the Port can look to future revenue streams from both maritime and commercial development to fund capital improvements for container shipping depends to a great extent on the outcome of the land use planning process.

The City could take on a more active role in financing future marine terminal development either through combining the Port with other enterprise departments, such as the Airport or the Public Utilities Commission, giving the Port access to a larger revenue base, or through the issuance of general obligation bonds. A Charter amendment would be required to restructure the management and funding of the Port and the other entities, and the State legislature would probably have to amend the Burton Act to authorize such an arrangement. For general obligation bond financing, a two-thirds majority vote of the electorate would be required, because a pledge of property tax revenues would be required to repay the bonds. Although the economic benefits to the City associated with the Container Shipping Industry would justify City financial support for Port development, there are numerous other public projects in the other enterprise departments, and the City at large, that compete for funding. The City taxpayers have never before been asked to directly fund Port improvements.

There is some consensus that regional, state or federal funding for marine terminal development would be appropriate. However, given the current economic and political context, no major funding initiatives are likely in the short run. Perhaps, in light of the sizable economic benefits associated with increased container cargo trade, capital investment funds may be forthcoming from these sources if the threat of losing those economic benefits becomes more imminent. The Port has been the beneficiary of federal and state funding for transportation projects, and those sources of funds will continue to be available for improvements to regional highway and rail systems. However, there is intense competition for those funding sources to address transportation objectives unrelated to container cargo trade.

Direct investment from shipping lines is another possible source of funds for at least some of the necessary capital improvements. However, the Port of San Francisco must compete with other Ports, many of which do not seek contribution from the shipping lines for major capital improvements. For example, the Port of Seattle receives funding from local taxpayers. Although it may be possible to attract some direct investment by a shipping line, that approach requires the Port to offer something in return, such as dedicated terminal space, and that has implications for the terminal operations and future revenue to the Port. Several other Ports have been the direct beneficiary of investment by railroad companies in the transportation infrastructure necessary for intermodal container shipping.[5] To date, the Port has not been successful in attracting substantial railroad investment in facilities with a direct benefit to the Port.

In light of the limitations on obtaining outside sources of funding for marine terminal development, the Port has traditionally looked within to find capital to meet the development needs of the container shipping industry. Although the Port adopted a goal of increasing shipping and international trade as part of its Strategic Plan, its ability to meet that objective is dependent upon the availability of funds for capital investment. The Port may, over time, be able to finance capacity improvements at existing terminals to maintain the current percentage share of the region's growth.

However, given the Port's current financial situation it seems clear that the Port alone can not finance the $240 million plus associated with developing six new container berths to meet the objectives of the Seaport Plan. It is in this context that the Port must determine how to allocate its most valuable resource, its land, in planning for the future of the Container Shipping Industry in San Francisco.

V. DESCRIPTION OF EXISTING OPERATIONS AND IMPROVEMENT PLANS

A. Description of Marine Terminal Facilities:

The maps attached at the end of this profile report show the location of the Port's active marine terminals, as well as the near term sites for future marine terminal development designated in the Seaport Plan. The land uses included within this profile of the Container Shipping Industry at the Port of San Francisco are:

1. North Container Terminal:

Location:	Adjacent to Islais Creek at the foot of Army Street. Truck access from 3rd Street or Interstate Highway 101 and 280 via Army Street on- and off-ramps. Rail access is more difficult, trains must switch tracks north of the terminal in the Mission Bay project area.
Operator:	Metropolitan California Stevedoring Company Pier 80 - Foot of Army Street San Francisco, CA, 94105
Area:	69 acres, with expansion potential at the former Western Pacific Railyard (35 acres), and through possible acquisition of adjacent privately owned land.
Berths:	4 deepwater (40'MLLW) berths.
Container Yard:	5,200 TEU capacity-port packer operation.
Container Freight Station:	85,750 square feet
Covered Storage:	Shed A-225,000 square feet Shed D-171,000 square feet
Gate House:	5 truck lanes

Shipping Line Tenants:

Blue Star Line
ELMA-Empresa Lineas Maritimas Argentinas S.A.
Maruba SCA
Nedlloyd Line
National Shipping Corp. of The Philippines
Naviera Interamericana Navicana
South Pacific Interline
South Seas Shipping Co.

2. South Container Terminal:

Location:	On Cargo Way off Third Street San Francisco's Southern Waterfront. Easy access by Interstate Highway 101 and 280 using Army Street on and off-ramps. Direct rail access is available from the Southern Pacific mainline.
Operator:	Stevedoring Services of America Pier 96 San Francisco, CA 94124
Area:	76 acres, with 75 additional acres available for expansion at Pier 94.
Berths:	3 deepwater (40'MLLW) berths.
Container Yard:	12,500 TEU static capacity-port packer operation.
Container Freight Station:	185,000 square feet.
Maintenance And Repair Buildings:	24,000 square feet.
Gate House:	14 truck lanes
Shipping Lines:	Associated Container Transport (Blue Star/PACE Line) Chilean Line China Ocean Shipping Co. (COSCO) Columbus Line Evergreen Line Flota Mercante Grancolombiana,S.A.

Shipping Lines: (Cont'd)

(GRANCO)
SPLOSNA-PLOVBA,
S.A. de C.V.
Transportation Maritima Mexicana
Zim Container Service

3. Dedicated Intermodal Container Transfer Facility:

Location:	Adjacent to the San Francisco Container Terminal-South.
Area:	36-acre facility
Facility:	Two loading/unloading tracks with a capacity of 42 standard intermodal railcars or 15 double-stack cars
	A 105-foot wide paved area between the two tracks for port packer operations.
	Three additional tracks for car storage and engine run-round.
	Two sets of dedicated gates: one directly into the South Container Terminal and one for the North Container Terminal.
	Parking for 200 45-foot container chassis.
Capacity:	Throughput capability of the facility is 105 railcars per eight-hour shift. (A railcar holds two 40-foot containers, four 20-foot containers, or a combination.) Buildout of the facility, when cargo volume warrants, will expand the area to 56 acres and will double throughput capability.

B. Development History

In 1982, the San Francisco Port Commission proposed the Southern Waterfront Master Plan for the development of container terminal facilities.

In 1984, the Port issued a series of revenue bonds, to be paid back from Port revenues, for the purpose of, among other things, container terminal improvements.

In 1986, the Port completed construction of (1) the first on-dock ICTF in California, and (2) gate improvements at the North Terminal (Pier 80.)

In 1987, the Port completed installation of two post-panamax container cranes at North Container Terminal.

In 1990, $2.6 million was expended to computerize the gate facilities at the South Container terminal, and complete other major improvements to streamline the entire container receiving and delivering system.

C. Throughput Capacity At Existing Terminals

There are a number of factors that affect the potential capacity of the existing marine terminal sites in San Francisco. The key factors are (1) Vessel loading and unloading operations, (2) Container yard operations and storage capacity, (3) Inbound and outbound truck gate operations and capacity, (4) Intermodal Container Transfer Facility (ICTF) operations and capacity, (5) Union work rules, and (6) Environmental considerations.

A review of the potential constraints on throughput capacity indicates that the Port has sufficient potential capacity at its existing terminal sites (including reserved expansion areas) to meet the growth forecast for the year 2010 (Assuming approximately 400,000 TEUs as shown in Table 2) plus the current volume of containers attributable to transhipment service. The analysis assumes that the operational needs of the shipping lines do not change significantly over the next twenty years in a way that would reduce the throughput capacity of the terminals. Achieving the full capacity potential assumes that the Port has the financial resources to fund its modernization program for the existing terminal sites.

D. Port Modernization and expansion plans:

Of the planned capital improvements to modernize and expand the Port's container terminals, projects totaling approximately $5.5 million have been funded, funding of approximately $10 million has been earmarked for the tunnel improvement project, and approximately $45 million in projects are planned, but not funded. The full cost of developing the sites reserved for expansion is not known.

Modernization and expansion plans include:

(a) Conversion of the North Terminal (Pier 80) into a fully containerized cargo handling facility. ($7.8 million)

(b) Incorporation of the former Western Pacific Rail Yard (to be acquired through the Mission Bay land exchange) into the North Terminal facility. (Development costs are not estimated yet.)

(c) Modification of two Southern Pacific main line rail tunnels to accommodate double stack rail cars. ($10 million)

(d) Installation of additional throughput enhancements to existing terminals. ($30 million)

(e) Incorporation of adjacent private property into the North Container Terminal. (Acquisition cost of approximately $3.5 million.)

(f) Incorporation of the undeveloped lands into the South Container Terminal. (Development costs are not estimated yet.)

(g) Construction of a new rail and truck bridge across Islais Creek. ($4 million)

In addition, the Port of San Francisco has identified the following additonal transportation access improvements that may be funded, at least in part, through Federal and State Transportation funds. These projects include:

(a)	I-280 Truck Access	$ 6 million
(b)	I-280 Evans Street Ramp	$ 3 million
(c)	I-80/280 Connector	$ 4 million
(d)	I-80 Army Street Off-Ramp	$ 2 million
(e)	Bay Bridge -Automated Vehicle ID Program	$ 1.5 million
(f)	I-80/880 West Grand Connector	$ 1.5 million
(g)	I-880 West Grand ramp	$ 6 million
(h)	SP Quint Street Lead curves	$ 1.5 million
(i)	SPMainline Snowsheds/Tunnels	$15 million

This list of transportation projects does not include improvements required to repair the damage to transportation infrastructure caused by the Loma Prieta Earthquake.

E. Container Shipping Industry Support Services and Facilities:

The container shipping industry is more than just the shipping lines and terminal operators. There are numerous other businesses that provide critical services and facilities necessary to assuring

the Port of San Francisco's place as a container shipping port. There will be a separate profile report on these industries, and a roundtable discussion session to address the land use requirements of these businesses. The various support services and facilities have been identified below. Port Staff would welcome comments as to the completeness of this list. In addition, to the extent that growth in container shipping at the Port of San Francisco is dependent upon growth in these ancillary and support businesses, then those relationships should be identified as part of the discussion of the container shipping industry.

(a) Container and Chassis Repair

(b) Foreign Trade Zone No.3 - Duty Free Foreign Trade Zone and Duty Free U.S. Customs Bonded Public Warehouse.

(c) Container Freight Stations/Warehouse Operators

(d) Cold Storage Facilities

(e) Export Packers

(f) Certified Public Scales

(g) Marine Surveyors

(h) Customs House Brokers/Freight Forwarders

(i) Non-Vessel Operating Common Carriers

(j) Shipper Agents

(k) Tug and tow operators

(l) Bar pilots

(m) Off-shore services

(n) Dredging operations

(o) Inspection/Regulatory - USDA Laboratories, FDA, US Customs etc.

As discussed above, development pressure from other higher value land uses has resulted in the displacement of these business from property in areas adjacent to the Port. To a certain extent the viability of the Container Shipping Industry depends upon these support services being available in San Francisco. As part of this land use process the Port must assess the relationship between the availability of support services and the growth prospects for container shipping, and take steps to protect and accommodate these uses.

G. Implications for the Port of San Francisco:

There are a number of implications from this assessment of current marine terminal facilities and development plans. The Port has made substantial investments in container terminal facilities, and intends to continue to do so to the extent its resources and sound risk management practices will allow. Improvements are necessary to maintain existing levels of activity, and to accommodate increased container volume in the future. There is sufficient potential capacity at existing terminal sites (including reserved expansion sites) to accommodate forecast demand through the year 2010, assuming that those terminals can be improved to operate more productively, and that the demands of the shipping lines do not change significantly.

The Port has reserved 75 acres of land at Piers 94 - 96, and approximately 40 acres should be available at the North Container Terminal through acquisition of the Western Pacific site and adjacent private property. However, funds to develop those sites are not yet available. These lands are reserved for direct container terminal uses. Due to competition for land and development pressure, the amount of industrially zoned land in San Francisco has decreased substantially. For example, the Mission Bay project will eventually displace a number of businesses that serve the container industry or provide sources of cargo for shipment throughthe Port. Thus, a separate question is whether or not the Port must also reserve land for businesses that provide support services to shipping lines or terminal operators, or otherwise contribute to San Francisco's competitiveness in container cargo shipments.

With respect to the Seaport Plan terminal expansion site designations, the Port does not have detailed development plans for implementing the Seaport Plan objectives. In order to satisfy the conditions of the 1989 revisions to the Seaport Plan, the Port must "develop a strategy ... to ensure that port priority use areas are reserved for port purposes consistent with the Seaport Plan, and the non-port-owned areas needed for marine terminal uses at the Piers 70 to 80 area are available to the Port.

VI. Conclusions:

The growth forecast for container cargo trade in the Bay Area projects a fourfold increase over existing volume within twenty years. Assuming that recent trends in the container shipping industry, or recent developments in the regulation of dredging, do not portend radical changes that will divert growth to other regions, Bay Area ports face a substantial challenge to provide terminal facilities to accommodate this growth. The Seaport Plan estimates that more than one billion dollars will be required to achieve the additional marine terminal capacity called for in the Seaport Plan.

The Port of San Francisco's Strategic Plan includes a goal of increasing shipping and international trade. Given current market trends, the Port can achieve this goal by pursuing growth in container cargo volume. However, in order for the Port to create the conditions presumed in the regional growth forecast, it must improve its intermodal transfer capability to allow it to offer double stack rail access. Assuming that the tunnel project is completed, then the Port would be in a position to maintain its percentage share of forecast growth in container cargo volume. There are a number of issues that must be addressed before the Port could actually realize the full growth potential of the container shipping industry.

As discussed above in Section III, there are significant regulatory and environmental issues associated with container terminal expansion. Although some regulatory agencies support marine terminal development, other regulatory agency policies with respect to disposal of dredged spoils could significantly affect the ability of regional ports to compete for container cargo growth. Assuming unlimited funds, container terminal expansion and development could occur with minimal adverse environmental impacts. Similarly with adequate funding to overcome safety and space constraints, public access to the Bay could be maximized at terminal sites. However, the Port has traditionally looked to its own financial resources to fund terminal improvements, and those funds are limited. Thus, as long as the Port continues to be financially self-reliant there will be tradeoffs between achieving environmental and regulatory objectives and achieving growth in the container shipping industry.

The greatest impediment to realizing growth in container shipping is obtaining funds for the capital improvements necessary to improve marine terminal capacity. As discussed above in Sections IV and V., the Port can accommodate the growth forecast for the year 2010 at existing terminal sites, including reserved areas. Before the Port could begin to achieve the objectives of the Seaport Plan, at a cost of $240 million, it must first find the $60 million , or more, to improve throughput capacity of its existing terminals.

In the past the Port has issued revenue bonds to finance capital investment, depending upon revenues from all sources to support repayment. Although the Port has improved its revenue from container shipping recently, principally through the introduction of transhipment service and growth in the transpacific liner trade, no other significant new source of revenue has been developed at the Port in many years. Furthermore, container shipping is a capital intensive industry, requiring high cost, up front investment to provide the necessary facilities. The return on that investment must be measured over the long term, and with adequate consideration to the broader economic impacts associated with container cargo trade.

Although the Port has some funds available for capital investment, and can expect the container industry to produce revenue to offset a significant portion of the improvement costs, the Port

to offset a significant portion of the improvement costs, the Port can not generate $240 million or more, from existing internal sources. In fact, it is doubtful that, in the near term, the Port can internally fund the $60 million or more required to achieve its capital improvement program for existing terminals without some additional revenue stream from new Port business, or an alternative funding source.

The Port strategy to date has been to reserve Port land near its existing active terminals, and to obtain additional land in the terminal area through exchanges and possible acquisitions. Although the Port has not been in a position to develop its land reserves, selective incremental improvements in the existing terminals have been effective in improving productivity, and ultimately meeting the capacity requirements of current Port customers.

The Port now faces a critical juncture in its development history. Assuming that the Port undertakes the tunnel improvement project, the prospects for growth in container cargo volume are excellent. The opportunity to share in the economic benefits associated with the growing container cargo trade is not, however, without cost, both financial and environmental. It is in this context that the Port must plan for the long term use of its most valuable resource, its land.

VII. Discussion Issues

There are a number of options available for any given parcel of land with respect to the Phase I land use plan for shipping and water dependent uses, including:

(1) Incorporate Seaport Plan land use designations which would reserve additional sites for marine terminal development and limit uses to those permitted in "Port Priority Use Areas", as defined in the Seaport Plan;

(2) Retain existing Master Plan and Zoning Map industrial use designations, which would permit container terminal development, but also permit uses other than the Port Priority Uses, such as general warehousing;

(3) Identify property as surplus to the needs of shipping and water dependent industries so that it can be included in the Phase II land use plan and change existing Master Plan and Zoning Map land use designations accordingly.

Issues to be considered that will help to focus the decision making process include:

1. Are there recent trends or developments in the container shipping industry that indicate a need to revise the Seaport Plan forecasts and concomitant land use designations? (See the attached suggested list of questions for industry representatives.)

2 Do the trends and factors outlined in Section III above have implications for the future of Container Shipping that are specific to San Francisco, and that will affect the Port's ability to capture forecast growth in container trade? What are all of the impediments to growth in container trade in San Francisco?

3. What are the risks associated with reserving land for marine terminal expansion if either actual demand for marine terminal capacity falls short of the Seaport Plan forecast demand, or if the Port is unable to garner sufficient capital to capture the potential growth in container shipping?

4. What is the potential for interim productive use of property ultimately designated for marine terminal expansion?

5. What is the probability that the Port will be able to identify a source of funding for $300 million, or more, in capital improvements necessary to achieve the current capital improvement program for existing container terminals, as well as the Seaport Plan expansion program?

6. What are the implications of deviating from the Seaport Plan designations? Would permitting alternative land uses necessarily preclude marine terminal development? What are the regional implications of such a decision, both environmental and economic?

7. What are the land use and environmental implications of developing additional marine terminal capacity at the Port?

8. What are the opportunities for incorporating public access at existing and/or future marine terminal facilities?

9. To what extent is growth in container shipping dependent on the Port accommodating corresponding growth in uses that serve the Container Industry? (Note: This issue will be explored more fully in a subsequent session devoted to maritime support services.)

Footnotes:

1.} Manalytics, The Competitive Position of The Bay Area Container Ports, A report to the Metropolitan Transportation Commission, July 1987.

2.} Manalytics, San Francisco Bay Area Cargo Forecasts to 2020 and the Future Demand for Marine Cargo Terminals, October 1988.

PROPOSED QUESTIONS FOR CONTAINER SHIPPING INDUSTRY REPRESENTATIVES

1. Are there any recent developments of which you are aware that would call into question the growth forecast for container shipping at Bay Area ports (projecting a fourfold increase in container volume over the next twenty years)?

2. Reviewing some of the industry trends identified in the report on pages 3 - 5, do you see any specific implications from those trends for the Port of San Francisco?

3. Do you share the view that the growth potential for rail-oriented cargo is greater than for local-oriented cargo? If so, do you agree with port staff that implementing the project to increase rail tunnel clearance should be a high priority for the Port of San Francisco?

4. What role should container shipping industry representatives play in addressing regulatory and environmental issues confronting Bay Area ports?

5. What do you see as the implications for the future of container shipping in the Bay Area if terminal operation costs increase as a result of higher costs for disposal of dredged material?

6. What opportunities exist for incorporating greater public access into the Port's container terminals?

7. What factors would your company consider before deciding to make a direct investment in terminal facilities? Of those factors, which exist or do not exist in San Francisco?

8. Do you foresee the federal or state governments assuming more responsibility for capital investment in marine terminal development?

9. What do you see as the most pressing container terminal facility improvements for the Port of San Francisco? Are there other improvements to the overall transportation network that you see as critical to the future of the Port of San Francisco?

10. Are there enough businesses and facilities in San Francisco to provide necessary support services to the container shipping industry (e.g. chassis repair, cargo sourcing, warehousing, etc.)? For which of these industries is proximity to the terminal important to efficient operation? Do you see any reason that growth in these ancillary businesses will not automatically follow increases in the volume of container shipping?

ATTACHMENT 1

CAPITAL PROJECTS SUMMARY SCHEDULE

	Project Cost	Total
FUNDED PROJECTS		
1. Container Terminals		
A. North Terminal		
* Reefer receptacles (#3)	$ 274,000	
* Utilities, striping, paving (#5)	$ 4,450,000	$4,724,000
B. South Terminal		
* Paving repair (#1 & #2)	$ 383,683	
* Crane Improvements (#4)	$ 30,000	$ 413,683
2. Seafood Center/Hyde St. Pier		
* Hyde St. Pier EIR (#16A)	$ 300,000	$ 300,000
Total Funded Projects		$ 5,437,683
FUNDING EARMARKED		
1. Container Terminals		
A. North Terminal		
B. South Terminal		
* Starporter Crane Spreader	$ 153,438	$ 153,438
C. Both Terminals *		
* Tunnels	$10,000,000	$10,000,000
Total Funding Earmarked		$10,153,438
UNFUNDED PROJECTS		
1. Container Terminals		
A. North Terminal		
* Rehab administration bldg (#24)	$ 85,000	
* Purchase Burns property (#26)	$ 3,500,000	$ 3,585,000
B. South Terminal		
* Starporter Crane modernization (#13)	$ 2,300,000	

	Project Cost	Total
* Two new container cranes (#17A)	$14,000,000	
* Settlement correction (#17B)	$ 500,000	
* Electrical upgrade to support cranes - phase 1 (#17C)	$ 700,000	
* Electrical upgrade to support cranes - phase 2 (#17D)	$ 2,200,000	
* Yard releveling (#22)	$ 650,000	
* Structural upgrade (#27)	$ 3,000,000	
* Paving for chassis storage (#28)	$ 1,000,000	
* High mast lighting renovation (#23)	$ 600,000	
* High mast lighting paved area phase 1 (#29)	$ 600,000	
* High mast lighting paved area phase 2 (#30)	$ 500,000	
* Utility undergrounding (#34)	$ 800,000	$26,850,000
C. Both Terminals		
* Illinois street bridge (#15) **	$ 4,000,000	$ 4,000,000
D. Other Cargo Terminals		
* Pier 70 deck rehabilitation (#11)	$ 290,401	
* Pier 70 PCB transformer replacement (#31)	$ 1,500,000	
* Pier 70 structural rehabilitation (#33)	$10,209,599	$12,000,000
2. Environmental Projects (required by law)		
* Dumpsite closure at Pier 70 (#8A)	$ 13,200	
* Dumpsite closure at Pier 94 (#8B)	$ 4,415,000	
* Dumpsite closure at Pier 98 (#8C)	$ 5,000,000	
* Asbestos removal at Ferry Bldg (#9)	$ 265,088	
* Asbestos survey (#18A)	$ 109,000	
* Asbestos removal (#18B & #18C)	$?	
* Underground storage tank soil treatment (#14)	$ 523,000	
* Dumpsite closure implementation plan	$ 175,000	$10,500,288
3. Other		
* Substructure Repair at Piers 1 1/2, 3, 5, 5 1/2 (#10)	$ 2,000,000	

	Project Cost		Total
* Embarcadero Parkway drainage (#12)	$ 1,000,000		
* Hyde Street Pier (#16B)	$ 7,293,255	**	
* Seafood Center (16C)	$ 7,064,352		
* Replacement of sewer lines at various locations (#19 & #20)	$ 82,000		
* HVAC replacement in Ferry Bldg (#21)	$ 60,000		
* Seismic safty survey (#25)	$ 40,000		
* Utility survey (#36)	$ 50,000		
* Pier 35 structural rehabilitation (#32)	$ 4,700,000		$22,289,607
Total Unfunded Projects			$79,224,895

* $1 million in outside funding has been secured for the Tunnel project.

** Grants have been secured in the amount of $2 million for the Illinois Street Bridge and $3.2 million for the Hyde St. Pier projects.

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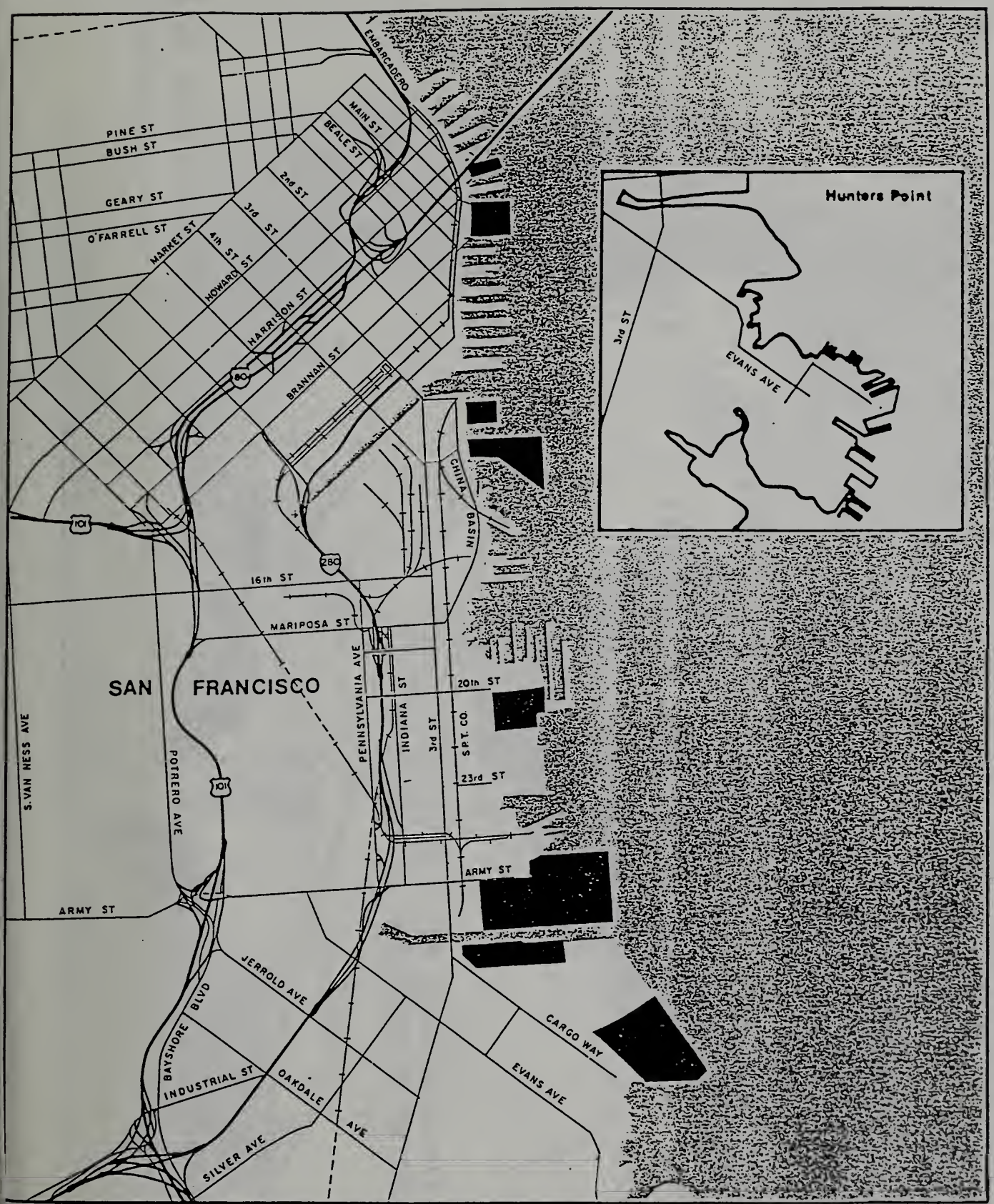
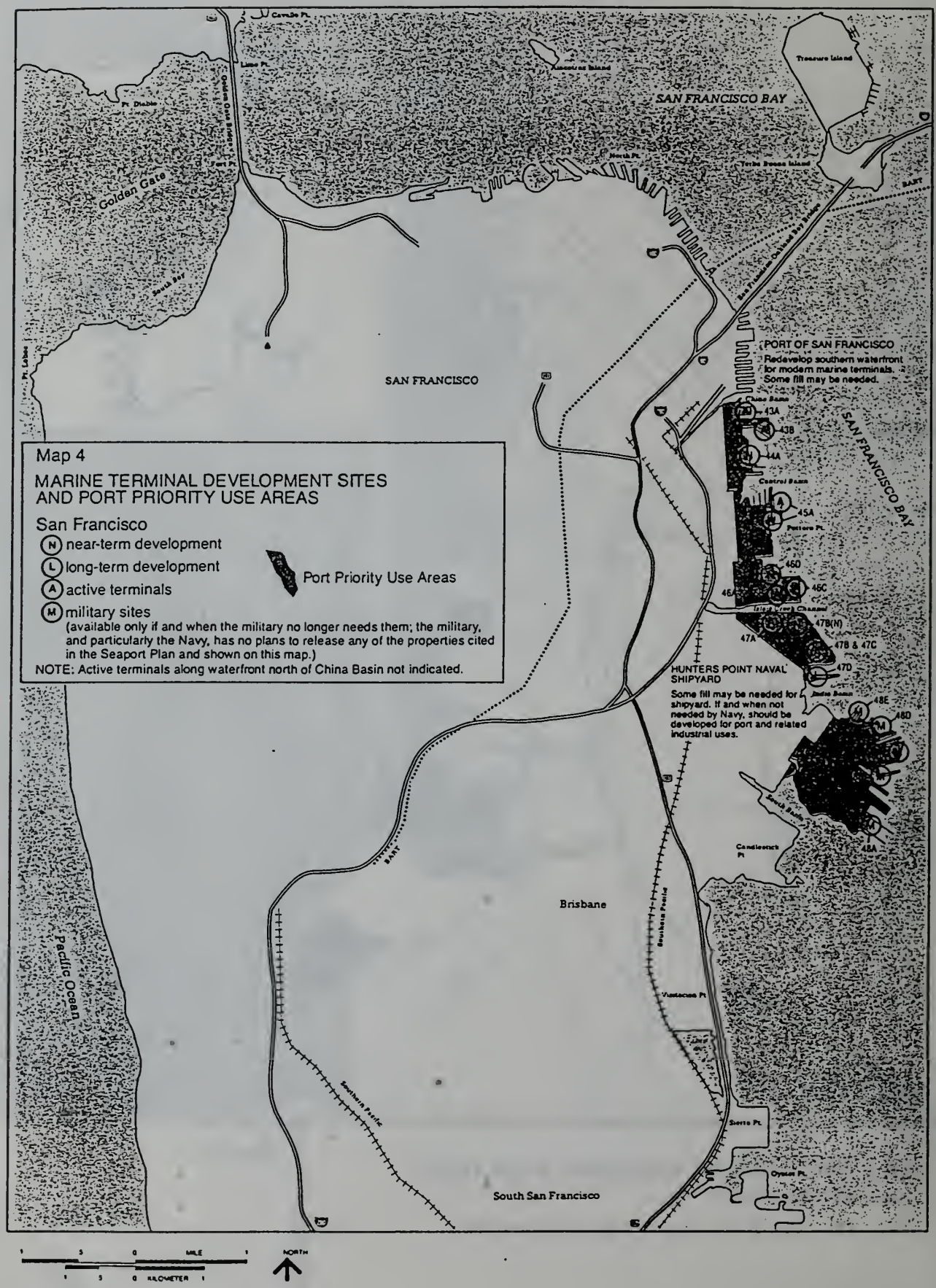


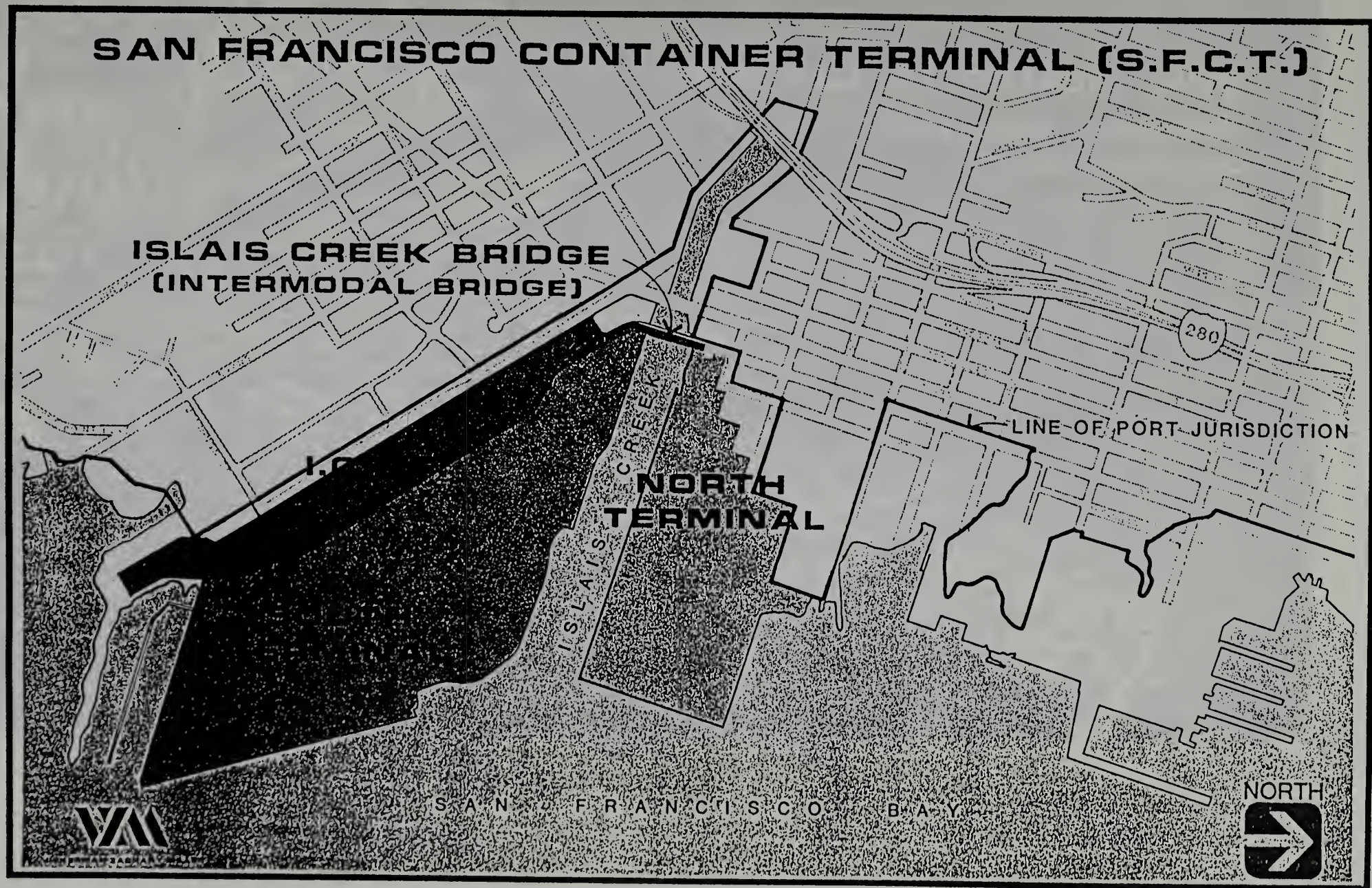
EXISTING MARINE TERMINAL FACILITIES SAN FRANCISCO

(Piers 15/17, 27/29, 31 and 33 north of Bay Bridge not shown)

Figure 10

0 0.5 MILES


Map 4
MARINE TERMINAL DEVELOPMENT SITES AND PORT PRIORITY USE AREAS
San Francisco
N near-term development
L long-term development
A active terminals
M military sites
(available only if and when the military no longer needs them; the military, and particularly the Navy, has no plans to release any of the properties cited in the Seaport Plan and shown on this map.)
NOTE: Active terminals along waterfront north of China Basin not indicated.
Port Priority Use Areas
SAN FRANCISCO BAY
Golden Gate
SAN FRANCISCO
PORT OF SAN FRANCISCO
Redevelop southern waterfront for modern marine terminals. Some fill may be needed.
HUNTERS POINT NAVAL SHIPYARD
Some fill may be needed for shipyard. If and when not needed by Navy, should be developed for port and related industrial uses.
Brisbane
South San Francisco
Pacific Ocean
Southern Pacific
BART
43A
43B
44A
45A
46D
46C
47B(N)
47A
47B & 47C
47D
48E
48D
48A
MILE
KILOMETER
NORTH


SAN FRANCISCO CONTAINER TERMINAL (S.F.C.T.)
ISLAIS CREEK BRIDGE
(INTERMODAL BRIDGE)
ISLAIS CREEK
NORTH
TERMINAL
280
LINE OF PORT JURISDICTION
SAN FRANCISCO BAY
NORTH

PORT OF SAN FRANCISCO

SAN FRANCISCO CONTAINER TERMINAL

PROJECT LOCATION MAP

VICKERMAN/ZACHARY/MILLER
ENGINEERING & ARCHITECTURE

SF
458
3
Cruise Industry

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SAN FRANCISCO PORT COMMISSION
WATERFRONT PLAN ADVISORY BOARD

STATEMENT OF FACTS AND ISSUES AS TO THE LAND USE REQUIREMENTS OF THE CRUISE INDUSTRY

(Revised 6/2/92)

The following material provides a summary of the facts and issues relating to land use requirements of the Cruise Industry, as identified in the profile report and in the workshop with industry representatives:

I. FACTS AND ISSUES RELATED TO THE ADEQUACY OF CURRENT LAND AND FACILITIES TO MEET FUTURE INDUSTRY NEEDS:

- The cruise industry has historically been an important part of the San Francisco waterfront and although San Francisco is a desirable cruise destination growth in the San Franciscan market depends primarily on factors beyond the Port's influence. The major factors working against San Francisco becoming a major cruise market are San Francisco's central location on the west coast (which places it 1-2 sailing days further away from major cruise destinations such as Alaska and Mexico, in comparison with Southern California and Vancouver) and current cabotage laws (as referred to in Pt. II). Changes in these regulations are currently being discussed, however even if significant growth in the San Francisco market were to occur it is still unlikely that San Francisco would require more than a two berth facility. (Although a temporary third berth should be available in the event that three cruise ships should call simultaneously.)

- Although the current facility at Pier 35 provides two berths, there are several physical limitations that have led the Port to consider Piers 30-32 as a more appropriate site for a new cruise terminal. The physical limitations mentioned by the industry experts include the need for frequent dredging and inefficient ship and passenger servicing facilities. The industry experts noted that in particular problems existed with lack of adequate parking, difficult ingress and egress for drop off of passengers, difficulties that service vehicles have in gaining access to the pier, and the lack of a public viewing area. The limitations on Pier 35 are most acute when two ships call on the facility simultaneously. If significant growth in the industry were to occur this would become more of a problem at Pier 35.

II. IMPLICATIONS OF REGULATORY AND ENVIRONMENTAL ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The U.S. Passenger Service Act prohibits passenger carriage on vessels between U.S. Ports on foreign flagged vessels. Since there are only three U.S. flagged deep sea cruise vessels, this prevents most cruise lines from offering itineraries that would carry passengers one way between San Francisco and other U.S. cities along the coast. Attempts are underway to have this Act amended to allow foreign flagged vessels to operate one way cruises from U.S. ports to Alaska. If this occurs it could have growth implications for San Francisco.

- Due to the berth configuration, which is perpendicular to prevailing currents, Pier 35 requires annual dredging of an average of 50,000 cubic yards to maintain adequate water depth for larger cruise ships. Resolution of the dredge disposal problem through the Long Term Management Strategy could determine whether or not cruise operations can continue to operate cost effectively at Pier 35. A new facility that is proposed for Piers 30-32 would reduce dredging requirements, since no dredging would be required for the eastern berth, and considerably less dredging would be required for the southern berth.

III IMPLICATIONS OF FINANCIAL AND ECONOMIC ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The Port generates a positive annual cash flow of around $100,000 from passenger, dockage and wharfage fees charged to the cruise lines at Pier 35. Taking into account the costs associated with passenger lounge upgrades in the last ten years however, the terminal has roughly broken even. The Port estimates that the existing facility at Pier 35 currently requires a minimum of $1 to $2 million in maintenance improvements.

  In addition, industry experts have advised the Port that extensive renovation to the existing Pier 35 cruise terminal facility is desirable. Although the industry experts disagreed as to the extent of the renovations that are needed, all of the experts agreed, that such renovations could not be financed through growth in the cruise business since this relies on other factors unrelated to the facility.

- The trend in new cruise terminal developments has been to integrate ancillary commercial activities into the terminal facility. All recently constructed new cruise terminals in North America have included some commercial facilities such as hotels, convention and conference space, retail shops restaurants and parking garages. In 1990 the Port received a proposal for such a facility for Piers 30-32 and SWL 329 and 330 across the Embarcadero. Revenues generated from the proposed ancillary commercial development would be sufficient to pay for the new cruise terminal facility. The developer is now attempting to obtain financing for the project. In the event that project financing is obtained the project will still be subject to a public approval process that will include an EIR and review by the Port Commission, City Planning Commission, and BCDC. In the event that the proposed project is not successful, other options could be evaluated, such as integrating commercial activities into a renovated terminal at Pier 35.

- The cruise industry contributes between $50 and 70 million annually in direct and indirect impacts to the local economy. These impacts are in the area of fees paid directly to the Port, stevedoring companies, bar pilot and tugboat operators, ship repair companies and in direct spending by passengers for lodging, and air/ground transportation, restaurants, and other forms of entertainment.

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CRUISE INDUSTRY PROFILE

I. INTRODUCTION

This profile of the Cruise Industry includes the following components:

. General market trends for the cruise industry are presented, including a discussion of the factors that may affect those trends, and the implications for the Port of San Francisco.

. Regulatory and environmental issues are identified, including cabotage laws, dredging, and opportunities for improving public access, and their implications for the Port of San Francisco are discussed.

. Financial and economic issues are discussed, such as the impact of the cruise industry on the local economy and the financial considerations in assessing the development and operation of a cruise terminal.

. A description and assessment of the existing passenger cruise terminal facility at Pier 35 is provided, along with an evaluation of the decision to either renovate the existing terminal or construct a new terminal.

. The issues associated with the operation and development of the cruise industry that must be addressed as part of the land use planning effort will be summarized. In addition, a list of questions that the Advisory Board members may want to pose to industry representatives is attached.

II. GENERAL MARKET TRENDS IN THE CRUISE INDUSTRY

Overall Growth

The North American cruise industry has grown dramatically over the past twenty years, with the number of passengers embarking in North America increasing from approximately 100,000 in 1970 to an estimated 3.3 million in 1990. Growth in passengers is expected to continue at a slightly lower rate over the coming decade, with over 5.5 million North American cruise passenger projected for the year 2000.

Diversification and segmentation

In response to consumer demand, the cruise industry has diversified from "traditional" two-week or longer, around-the-world type cruises and is now offering a much wider variety of cruises. Most of the new cruise packages are shorter in duration (eight days or less), offer more time at on-land attractions and include one-way return air or ground transportation.

In a market where cruises are getting shorter and more affordable, it is more economical for cruise lines to fly passengers to gateway cities such as Vancouver for Alaska cruises and Los Angeles or San Diego for Mexican cruises, than incur the time and expense of extra sailing days to and from San Francisco.

These primary "gateway" cities dominate the US cruise market. For example, Vancouver and Los Angeles captured over 85% of the west coast cruise market in 1989. The operation of the cruise terminals in markets with high volumes of passengers is financially very successful, due to the high turnover and utilization of the facilities. (The financial aspects of cruise terminal operations will be discussed in detail in Section III).

Seasonality

Currently, the cruise industry in San Francisco is very seasonal, lasting from mid-May until mid-October. This is the peak of the Alaskan cruise season, which makes up the majority of San Francisco cruises. Many cruise ship calls to San Francisco in May are from ships on so-called "repositioning" cruises, when cruise lines are transferring ships from winter cruising in the Caribbean or Mexico to summer cruising in Alaska. In September and October, the ships also "reposition" in the opposite direction and frequently call in San Francisco.

Days of the week

In general, most cruise lines prefer to schedule their arrivals and departures on or near the weekends, especially for seven or fourteen day cruises. This makes the cruise more appealing to people who only want to take one week off from work to go on a cruise.

Days of the week (continued)
There are exceptions to this general trend toward weekend departures and arrivals. A cruise line in San Diego operates a day cruise to Mexico that departs every day of the week, and is quite successful. Other very short cruises could also take advantage of the availability of berth space during the middle of the week as well.

New cruise markets
There are many variables within the cruise industry that could potentially increase the amount of cruise ship activity in San Francisco. A wide variety of new types of cruises are being considered within the industry including "cruises to nowhere" or gambling cruises, coastal cruises between U.S. cities, and auto/ferry cruises.

Cruises to nowhere
These are short day or overnight cruises where no ports are called, and the ship returns to the same embarkation point. At ports in Florida and Texas, cruises to nowhere are increasing in popularity. The key component of success for these cruises from the cruise line's standpoint, however, is the ability to offer gambling on the vessels, which is currently prohibited by California law. (These cruises are permitted by cabotage law).

Coastal Cruises
These cruises would involve transporting passengers between west coast cities: Vancouver, Seattle, Portland, San Francisco, Monterey, San Luis Obispo, Santa Barbara, Los Angeles, San Diego, etc. However, foreign ships are restricted from offering these cruises by cabotage laws. One type of coastal cruise that has been proposed would involve an auto/ferry cruise from San Francisco to Los Angeles with gambling on board the ship. However, there are currently no vessels in existence that would be suitable for this type of cruise, and state laws prohibit gambling.

Cruise Marketing by Ports
The busiest cruise ports, in addition to being located in fairly close proximity to cruise destinations, also conduct extensive cruise marketing programs. Cruising is a competitive business, and cruise ships are very flexible in where they call. A proactive approach to attracting cruise business has been adopted by most ports because of the competitiveness of the market.

Implications for San Francisco

1. San Francisco's central location on the west coast places it 2-3 sailing days farther away from major cruise destinations in Alaska and Mexico in comparison with Vancouver and Los Angeles. San Francisco is one of the world's most interesting and desirable ports of call, yet the additional sailing time is a significant deterrent in attempting to expand the amount of cruise traffic in San Francisco.

2. Cruise itineraries which could result in a large increase in cruise activity in San Francisco (such as Hawaiian or coastal US cruises) are currently restricted by cabotage law, which prohibits cruises by foreign flag vessels between US ports. (These restrictions are discussed at length in Section III "Regulatory and Environmental Issues"). This restriction could limit the expansion of these new cruise types, due to the lack of American vessels.

   There are only two American large cruise ships in operation in the world today, both in Hawaii. The primary reasons that there are few American flagged cruise ships is that they are more expensive to build and maintain than foreign flag vessels, as they must be crewed by Americans and the keel must be laid in an American shipyard.

3. A marketing plan was developed by a "Cruise Industry Task Force" made up of Port staff, industry representatives, and other entities involved in the cruise industry. The implementation of the marketing plan could result in modest increases in cruise activity, but the aforementioned restrictions will likely prevent dramatic increases.

   The cost of the marketing plan is estimated at approximately $50,000, but the Port's budget for this purpose is limited. The budget for all Port marketing and promotional expenses was reduced by the Board of Supervisors, and the Port is facing a very tight budget for the coming year.

4. Scheduling considerations effectively limit the number of ship calls that can be accommodated in San Francisco. There is a preference for weekend arrivals and departures for cruises. Thus, while berth occupancy may be low on Tuesdays and Wednesdays when the berth could conceivably accommodate more ships, there are few itineraries that could attract passengers on those days.

   Taking seasonality and scheduling preferences into account, the maximum capacity of a cruise berth in San Francisco is approximately 150 ship calls per year. If a market were to develop for other types of cruises either during another time of year or for mid-week arrivals and departures, the effective capacity of a berth could increase above 200 ship calls per year.

Implications for San Francisco (continued)

5. Based on the factors described above, a two berth cruise terminal in San Francisco could conceivably accommodate between 300 and 400 ship calls per year. The greatest number of ship calls in recent San Francisco history came in 1985/86, with 78 ship calls during the fiscal year. This surge in activity was primarily due to Vancouver Expo and an increase in terrorism in the middle east, which temporarily curtailed the Mediterranean cruise market.

   The number of cruise ship calls and total cruise passengers in San Francisco for the past several years is shown below.

Fiscal Year	Total Cruise Passengers	Ship Calls
1983	57,300	52
1984	82,891	65
1985	92,753	77
1986	101,932	78
1987	73,261	64
1988	45,240	66
1989	40,621	35
1990	37,848	29
1991	32,759	35

6. Based on all of the above mentioned factors, a two berth cruise terminal should be able to accommodate foreseeable growth in the San Francisco cruise industry, unless a special cruise itinerary with unique scheduling requirements were to require additional berth capacity.

III. REGULATORY AND ENVIRONMENTAL ISSUES

US Passenger Service Act

Cabotage, the reservation of coastwise traffic to domestic ships, was introduced into U.S. maritime law in 1789. The present prohibition of passenger carriage between U.S. Ports on foreign vessels is contained in the Passenger Service Act of 1886. This law effectively excludes foreign flag vessels from transporting passengers one-way between U.S. ports. To the extent that there are a number of attractive one-way itineraries that would use San Francisco as a base, the Passenger Service Act presently prevents such scheduling by foreign flag vessels.

Specifically, the law requires that passengers taken between U.S. ports on a foreign flag vessel embark and disembark at the same Port. Passengers are allowed to disembark at a different Port if a "non-nearby" foreign port is visited first.

Of all the world's deep sea cruise vessels, only three are U.S. flagged; one is inoperable, and the other two are operated by American Hawaiian Cruise Line exclusively in Hawaii. The primary reason that there are so few American flagged cruise ships is that they are more expensive to build and maintain than foreign flagged ships, as they must be crewed by Americans and the keel must be laid in an American shipyard.

The Port of Seattle has led a recent effort to amend the Passenger Service Act to allow foreign vessels to operate one-way cruises from U.S. ports to Alaska on a three-year waiver basis. The waiver could be renewed every four years as long as there are no U.S. cruise vessels operating in the Alaska trade. The American seagoing labor unions have supported the Passenger Service Act, however, because they are concerned about labor impacts if foreign vessels were allowed to operate in a market that a U.S. vessel could serve.

Dredging

The existing cruise berths at Pier 35 require annual dredging in order to maintain adequate water depth for larger cruise ships. The Port dredged a total of approximately 200,000 cubic yards of material from Pier 35 between 1987 and 1990, or an average of approximately 50,000 cubic yards per year. At a cost of between $2.00 and $3.00 per cubic yard, the Port's annual dredging cost at Pier 35 has thus been between $100,000 and $150,000.

The recent controversy over disposal of dredged sediment caused by concerns about the impacts of dumping dredge spoils near Alcatraz reemphasized the potential for dramatic increases in dredge disposal costs. Ocean or dryland disposal of dredged sediment are alternatives being investigated, but are significantly more expensive than Bay disposal. These disposal alternatives could cause the Port's annual maintenance dredging cost for Pier 35 to increase dramatically.

Public Access

A passenger cruise terminal functions in much the same way as an airport terminal does. Passengers generally circulate on an upper level (usually the second or third floor) and baggage, provisions and other ship services are handled at the ground level. This presents a slight problem with respect to direct public access to the water at the ground level when cruise ships are at dock. The exterior of the pier (commonly referred to as the pier "apron") is the main servicing and loading area, and the public cannot be allowed in this area for safety and security reasons when ships are at dock. However, the pier "apron" provides a large public access area when ships are not at dock

In addition, an upper level viewing deck can provide excellent public access and serve as a bon voyage area, as long as adequate security measures are available for the cruise ship. Cruise ships are one of the truly unique features of the waterfront, and a cruise terminal can provide one of the best opportunities for public access to and appreciation of this unique feature of the Bay.

Implications for San Francisco

US Passenger Service Act

1. The Passenger Service Act and lack of American flagged vessels primarily limits the potential for one-way cruises to Alaska and Hawaii from San Francisco, as well as the development of any cruise itineraries between U.S. west coast cities. This limits the potential for growth in cruise ship activity in San Francisco.

2. Cruise line officials have stated that an exemption to the Passenger Service Act to allow foreign flag vessels to transport passengers between Alaska and the west coast will not have a significant impact on the number of cruise ships calling San Francisco. However, if the exemption also included Hawaii, large increases in San Francisco ship calls could result.

3. If the Passenger Service Act is amended, San Francisco can expect an increase in cruise ship activity. However, given existing under utilization of the cruise berths, there is very little possibility that growth in already existing cruise markets, along with the introduction of new cruise concepts, would create enough demand to require more than a two berth terminal in San Francisco.

Dredging

1. Dredging may become a regulatory constraint on the cruise industry in San Francisco, due to increased dredge disposal costs. A large increase in dredge disposal costs could have a devastating impact on the Port's ability to continue to operate Pier 35 as a cruise ship terminal over the long term.

Public Access

1. The current cruise passenger terminal at Pier 35 is not configured to provide any public access, which is a shortcoming of that facility. The cost of reconfiguring Pier 35 to provide public access would be substantial, and there is no available funding for the work.

2. A newly constructed cruise terminal would be required require by BCDC to provide adequate public access within the facility. A new cruise terminal could include a "bon voyage" area, which is a very important element of a cruise terminal.

IV. FINANCIAL AND ECONOMIC ISSUES

Financial Operation of Existing Terminal

The Port's direct revenue stream from the cruise industry is generated from passenger, dockage and wharfage fees charged to the cruise lines. The Port also generates revenue from leasing the Pier 35 terminal building to a stevedoring company (which in turn collects fees directly from the cruise lines).

The Port fees charged to the cruise lines are set as part of the Port's tariff. At this point, the Port of San Francisco's passenger, dockage and wharfage fees that apply to the cruise industry are in line with the rest of the U.S. Ports on the west coast.

The existing cruise terminal at Pier 35 generates positive cash flow for the Port from an operational standpoint. If the cost of the passenger lounge upgrade is taken into account, however, the terminal has roughly broken even over the past ten years.

If San Francisco were to attract additional cruise activity without making any additional investment in cruise terminal improvements, the terminal would likely be modestly successful from an operational standpoint. However, it is unlikely that the terminal could generate enough net revenue to cover the long term capital maintenance costs of the pier and the structure.

Cruise terminals with large volumes of passengers (such as Los Angeles, Miami, Port Everglades and Vancouver) are typically financially self-supporting, even after taking into account the cost of constructing and maintaining the terminal. The revenues generated from the large passenger volumes pays for the construction and ongoing operation of multiple cruise terminal docks and berths at each of these Ports.

Other Port Costs Related to the Cruise Industry

As mentioned earlier, most ports have adopted a proactive approach to attracting cruise business because of the competitiveness of the industry. The cost of cruise marketing programs varies between port, but in general most ports on the west coast spend more money and devote more effort and resources to attracting the cruise industry than San Francisco. The cruise industry expressed this sentiment to Port staff during the preparation in 1989 of the "Cruise Industry Marketing Plan".

Contribution to the Local Economy

The impact of the cruise industry is directly dependent on the number of ships and passengers that come to San Francisco. The direct and indirect impacts of the cruise industry are summarized below. Estimates of the cruise industry's total direct and indirect economic impact on the local economy range from $50 million to $70 million.

Contribution to the Local Economy (continued)

Direct
- fees paid directly to the Port, stevedoring company, bar pilot and tugboat operators, ship repair companies, etc.
- direct spending by passengers for lodging, air and ground transportation, restaurants, retail stores, entertainment and other services.
- direct purchases of goods and supplies by the cruise lines for ship provisions.
- direct spending by cruise ship employees

Indirect
- taxes collected by the City as a result of direct visitor spending (hotel tax, property tax, sales tax, business tax, airport enterprise tax, etc.)
- jobs supported by direct visitor spending (hotel, restaurant and bar, retail, entertainment and other service jobs).

Implications for San Francisco

Cruise Marketing

1. The Port will require a revenue source to fund the implementation of a marketing plan for the cruise industry. The cost of an extensive marketing program designed to increase the visibility of San Francisco as a cruise port is estimated at $50,000 to $100,000 per year. This is considerably less than other west coast ports spend on cruise marketing.

2. The Port's annual expenditure budget is the most likely source of revenue, but as has been previously mentioned, was cut by the Board of Supervisors. Many parties feel that the implementation of the cruise marketing program could result in increased cruise activity in San Francisco.

Cruise Terminal Operations

1. Improvements to the Port's cruise terminal facilities are necessary in order to better serve the cruise lines and cruise passengers in San Francisco. The Port will require a revenue source to fund these improvements to its cruise terminal facilities. The improvements could include the following measures:

   A. Improvements to the existing cruise terminal at Pier 35, including elevators, escalators, traffic control measures, aesthetic improvements, visitor services, etc.

      Estimated Cost: $1 to 2 million

   B. Major renovation to the existing cruise terminal, or construction of a new cruise terminal.

      Estimated Cost: $10 to $20 million

2. Potential Funding Sources

The potential funding sources include, but are not necessarily limited to, the following:

A. Cruise terminal operating revenues. The Port generated an average of $560,000 in wharfage, dockage, passenger fees and facility rental over the past eight years. The estimated operating expenses for the pier, including dredging, have averaged $450,000 during that time period.

However, the long term capital maintenance and repair costs for the pier will exceed the net revenues realized by the Port. Unless the Port of San Francisco were to experience dramatic and exponential increases in the amount of cruise activity, this revenue source will be limited.

B. Port capital reserve funds. The Port has a capital reserve deficit exceeding $70 million, not including any cost to repair or maintain the existing cruise terminal.

C. Revenue bonds. The same limitations that affect operating revenues would apply to revenue bonds. Large increases in cruise activity could result in large increases in operating revenues to the Port, and if the increases are dramatic enough a revenue bond could potentially be feasible. Since dramatic or exponential increases in cruise activity are not anticipated under any scenario, a revenue bond would not likely be feasible. Also, the Port is currently restricted from issuing and additional bonds.

D. Cruise Line Investment. There is no precedent for cruise lines investing directly in terminal facilities. The Port of Los Angeles has entered into a leasing and revenue sharing agreement with a consortium of cruise lines that creates a financial incentive for the lines to increase their cruise activity in Los Angeles. However, overall passenger volumes are substantially higher in Los Angeles than in San Francisco, which is one of the keys to making a revenue sharing agreement feasible. Even so, this agreement does not require the cruise line to take any risks in investing in terminal facilities.

The extent of the cruise line's interest in funding improvements to the cruise terminal facilities in San Francisco is uncertain.

E. Revenue from Commercial Development

The revenues generated by the Port from ancillary and related commercial development could be use to help pay for improved cruise terminal facilities. The Port has attempted to take this approach on several recently planned development projects. The preferred approach is for there to be a direct link between the commercial development and the maritime facilities.

V. DESCRIPTION OF EXISTING OPERATIONS AND FACILITIES

The Port of San Francisco plans, develops and implements a cruise ship program which serves Northern California, and markets the use of cruise ship terminal facilities to cruise ship operators.

Ancillary services to the cruise passenger terminal itself include bar pilots, tugboats, ship chandlers, stevedores, storage, customs, food and supply delivery, travel agents, shipping agents, cruise lines, and ship repair. Ancillary facilities include vehicle parking, bus parking and drop off areas.

San Francisco's Cruise Terminal Requirements

San Francisco's basic cruise terminal requirements have been determined to be the following:

Two full service berths. A primary berth a minimum of 1,000 feet long with a minimum 40 foot water depth, and a secondary berth a minimum of 900 feet long with a minimum 35 foot water depth. Preferably, the berths would need little or no dredging and at least one berth would be oriented parallel to the shoreline.

A full service terminal that can serve both berths simultaneously, and can easily and efficiently handle 6,000 passengers at its peak (when two ships are at dock).

Efficient, covered drive up baggage pick-up/drop off areas, bus parking areas and adjacent vehicle parking for passengers and visitors.

Passenger check-in and waiting lounge areas, U.S. Customs processing areas, elevators or escalators to upper levels, visitor information services, bon voyage area for visitors, public restrooms and telephones.

Minimum 25 foot wide apron, railing, direct street access for service vehicles, flexible gangway able to service two vessels simultaneously, secure covered storage area, utility hookups for ships.

Assessment of Existing Terminal

The existing passenger cruise terminal at Pier 35 was assessed in 1990 to determine its ability to serve the future needs of the cruise industry in San Francisco. The following is a summary of that assessment.

Pier 35 is in fair condition, although there is some deterioration of the pilings. The terminal should be physically capable of handling the next generation of passenger vessels (in terms of berth lengths) and the cruise industry's projected increases in passenger traffic (in terms of number of berths and size of terminal).

However, Pier 35 has several major shortcomings as a cruise passenger terminal:

Terminal configuration: While Pier 35 may be physically able to accommodate new, larger ships and increased passenger volumes, there are physical constraints that prevent easy and efficient ship servicing and negatively affect passenger flow and handling. These problems are compounded when two ships are berthed simultaneously, and include:

- passenger and vehicular circulation cannot be effectively separated because of the narrow width of the pier bulkhead entrance. This situation creates congestion and confusion and detracts from the cruise passenger's experience.

- there is no clearly delineated area for passenger drop-off or queuing areas for buses, taxis and automobiles.

- there is no direct vehicular access from the street to the ship servicing area on the pier apron.

The primary reason that Pier 35 was judged to be inadequate with respect to passenger and vehicular circulation was the narrow width of the pier (approximately 200 feet) and the location and width of the ingress and egress points to the Pier. A larger, wider pier could more easily accommodate all of the circulation requirements of a cruise ship terminal.

Berth Orientation and Dredging requirements. Both berths at Pier 35 are oriented perpendicular to the shoreline and the prevailing currents, and sediment builds up under these conditions. Pier 35 must therefore be dredged annually in order to maintain the water depth necessary for the largest cruise ships. The berth orientation also presents minor navigational problems, caused by cross currents and winds.

Public Access. There are no public access or public viewing "bon voyage" areas at Pier 35. Cruise ships are one of the public's favorite attractions, and Pier 35 offers the public a very limited opportunity to see the ships.

Appearance and atmosphere. Despite the second floor passenger lounge improvements completed in the early 1980's, many cruise passengers and cruise line officials consider the pier drab, unattractive, and uninviting for cruise passengers.

Feedback from the cruise industry indicates that while passenger comfort at any one terminal is not a determinant of cruise business, it is extremely important to both the cruise industry and the City. First impressions are very important in the tourism industry, and a good first impression created in a cruise terminal contributes to the enjoyment of the cruise passenger and is advantageous to the industry, the Port and the City.

The cruise industry has stated that the cruise passenger's experience is affected by the terminal. The cruise experience begins for passengers when they enter the terminal, and a bad experience at the beginning or end of a cruise can affect repeat business with the cruise line. Therefore, pleasant and inviting terminal facilities are preferred by the cruise lines and cruise passengers.

In another study of the cruise industry conducted for the Port in 1988, cruise lines were asked in a survey to compare San Francisco with other US ports with respect to an array of topics, including appearance of the terminal and facilities at the terminal. San Francisco compared more unfavorably with other US ports on this topic than on any other.

In other words, the terminal itself does not play a large part in the cruise line's decision to call San Francisco, but San Francisco's terminal is considered by the industry to be inferior to most others in the United States.

Sufficient parking. There is no on-site parking at Pier 35, and an insufficient amount of nearby parking. In addition, the nearby parking is not easily accessible and during the peak cruise season in the summer is overutilized. This lack of parking has been mentioned by the cruise lines as a problem with the existing terminal.

There is no standard formula to determine the "sufficient" amount of parking for a cruise ship terminal. A wide variety of variables would need to be examined in order to determine the parking demands for this type of facility. As a basis of comparison, however, the proposed new terminal at Pier 30-32 includes 300 on-site and 900 adjacent covered parking spaces.

Trends in New Cruise Terminal Development

There is a clear trend towards integrating commercial development with new cruise terminal development. All recently constructed or proposed new cruise terminals in North America (in Vancouver, Miami, Tampa and Seattle) have included some commercial facilities such as hotels, convention and conference space, retail shops and restaurants and parking garages.

The Port staff has reviewed published information on recent terminal projects, and had conversations with the Port officials overseeing these new projects. The general consensus is that integrated commercial facilities provide for a more interesting and pleasurable experience for cruise passengers. In addition, the revenues generated from commercial development help offset the cost of constructing the terminal facilities.

The Port received a proposal for a new cruise ship terminal at Pier 30-32 and SWL 329 & 330 in December, 1990. The proposal called for a full-service, two berth cruise terminal that met or exceeded all of the Port of San Francisco cruise terminal requirements (as listed on page 12 of this report). In addition, complimentary retail commercial and maritime office space, restaurants, and educational and exhibition space was proposed for the pier, with a 360 room conference hotel and parking garage proposed for SWL 329 & 330 across the Embarcadero.

Implications for San Francisco

1. Based on San Francisco's cruise terminal requirements, the existing passenger terminal at Pier 35 has been determined to pose operational difficulties in several important areas including passenger comfort and convenience, traffic congestion, dredging requirements, berth orientation, public access and parking. Addressing these difficulties will mean either a major renovation of the existing terminal at Pier 35, or the development of new terminal at another site.

2. The Port evaluated the decision to either renovate Pier 35 or develop a new terminal at another location. The factors taken into consideration are summarized and explained below.

   A. Many San Francisco residents and cruise industry representatives have stated that they view a cruise terminal as a "gateway" facility for the City. As such, the appearance and quality of the facility makes a statement about the Port and the City. The public and the industry have questioned whether a modest renovation of the Pier 35 terminal would satisfy the desire for a gateway facility.

   B. A series of workshops and studies conducted with the participation of the cruise industry found no evidence that the cruise terminal itself plays any substantive role in the cruise line's decision to call in San Francisco. The decision to make cruise terminal improvements should therefore <u>not</u> be based on the assumption that there would be an ensuing increase in cruise activity.

   C. While improving cruise terminal facilities will not likely cause cruise activity to increase, there was a concern among many parties that cruise activity could decline without <u>any</u> investment in Port facilities. There was general agreement that something needed to be done to improve facilities, but the Port could not afford to fund any improvements from operating or capital funds.

   D. The decision to proceed with the development of a new cruise terminal was based primarily on the deficiencies of Pier 35 and the lack of resources to fund substantial improvements.

      The primary reason that Pier 35 is inadequate is its narrow width and the constraints that this places on passenger and vehicular circulation. The configuration of the pier effectively prohibits efficient or desirable circulation, and presents significant operational difficulties. Also, regardless of the improvements made to the terminal itself, the dredging problem can never be mitigated.

      A larger, wider pier would be more easily able to accommodate all of the circulation requirements of a cruise ship terminal, and Pier 30-32 fit this requirement better than any other existing pier in the northern or central waterfront areas. In addition, Pier 30-32 offers the unique advantage of having the main cruise berth parallel to the shoreline and currents, thereby minimizing or possibly eliminating the need to dredge the berth.

E. The Port also determined that the construction of a new or improved terminal could best be accomplished in conjunction with commercial development that would generate revenue to pay for the cruise terminal improvements. Furthermore, there needed to be a direct link between the commercial development revenues and the improvements to the cruise terminal.

This approach was believed to be the least risky approach to funding improvements in the cruise industry. Other approaches would involve investing Port or other public funds upfront, and having to rely on increased business to repay the investment.

Thus, the site of an improved cruise terminal also needed to be physically large enough and configured in such a way as to be suitable for commercial development. Pier 35 was determined to be not as suitable for adjacent commercial development as Pier 30-32, due to the size and shape of the pier and the size and zoning restrictions of adjacent seawall lot properties.

VI. SUMMARY

The following questions summarize the issues associated with the operation and development of the cruise industry that must be addressed as part of the land use planning effort.

Questions for the Advisory Board

1. Are there any trends in the cruise industry that indicate that a two-berth terminal will not be adequate for San Francisco's foreseeable cruise ship berthing needs?

2. Are there any potential changes in the regulatory environment that could increase or decrease the demand for cruise berths?

3. Are improvements to the Port's cruise terminal facilities necessary in order to better serve the cruise lines and cruise passengers in San Francisco?

4. Are the physical requirements that have been established for San Francisco's cruise terminal appropriate?

5. Given that a new terminal will not likely generate growth in the cruise industry, but also given Pier 35's deficiencies with respect to passenger comfort and convenience, traffic congestion, dredging requirements, berth orientation, public access and parking, is it appropriate to pursue a new terminal site instead of an upgrade of Pier 35?

6. Are there any other sources of funds that should be considered to fund cruise terminal improvements other than operational revenues, public or Port funds, cruise line investment or revenues from commercial development?

7. If commercial development were to be ruled out, would any other funding source be suitable to fund cruise terminal improvements?

8. Are there any other approaches that should be considered as a way to achieve the goal of improving the Port's cruise terminal facilities?

Questions for Industry Experts

1. Will the overall cruise industry continue to grow rapidly?

2. Are shorter cruises really more popular now, and does this trend towards shorter cruises place San Francisco at a disadvantage?

3. Are there any possibilities to expand San Francisco's cruise market outside the existing season? What new types of cruises are there and would San Francisco be suitable as a departure or arrival point?

4. What effect could a marketing plan have on the amount of cruise business in San Francisco?

5. What are the prospects for amending the Passenger Service Act, and what effect would it likely have on San Francisco?

6. How concerned are you about water depth at the Pier 35 berths?

7. Do feel that public access and a "bon voyage" area are important aspects of a cruise terminal?

8. Would you consider investing in cruise terminal facilities in San Francisco, and if so, under what circumstances?

9. What is your opinion of Pier 35 with respect to terminal configuration, appearance and atmosphere, public access and availability of parking?

10. What, if any, might be the advantages of developing a new cruise terminal at a different location than Pier 35?

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STATEMENT OF FACTS AND ISSUES AS TO THE LAND USE REQUIREMENTS OF THE EXCURSION BOAT INDUSTRY

(Revised 8/28/92)

The following material provides a brief statement of the facts and issues relating to the land use requirements of the Excursion Boat Industry, and related support services, as identified in the profile report and in workshops with industry representatives.

I. FACTS AND ISSUES RELATED TO THE ADEQUACY OF CURRENT LAND AND FACILITIES TO MEET FUTURE INDUSTRY NEEDS.

- Growth in the excursion industry varies by market segment, although all market segments benefit by increases in visitors to the area. The dining cruise and small charter segments depend upon Bay Area visitors, locals and convention visitors as their principal market. Sight-seeing tours and recreational ferry ridership depend more upon visitors who are vacationing in the Bay Area. The greatest amount of growth potential appears to be in the dining cruise and small charter segments, especially for lower priced individual dining opportunities, as well as for business groups.

- Existing operators need additional land to meet current requirements. One major operator (Hornblower) is on a thirty day license at a small facility at Pier 33 and has expressed a desire for a longer term lease. In addition, all of the dining cruise operators expressed the desire to have access to facilities near the downtown area for loading business groups.

- Excursion boat locational requirements depend upon the market segment being served, with visitor oriented services preferring locations close to Pier 39 and Fisherman's Wharf, and services oriented to convention or business groups interested in downtown locations. Visibility from the street is a prime concern, as is availability of parking, loading and storage areas in close proximity to the berth. The dining cruise operators are more concerned about parking than others, because their guests typically depart late in the evening when public transit is not as readily available.

- Waterfront facilities for the excursion boat industry (including dining and sight-seeing cruises, recreational ferry riders and small charters) are currently provided in the area of Pier 31 to 43 1/2, the Ferry Building and South Beach Marina.

- In a recent study the Port examined possible sites for additional excursion boat facilities including Piers 31, 17-19, 9, 3, 1, and 28, with the conclusion that Piers 3 and 9 offer the most feasible development opportunity for a large multi-use facility. Although the operators have expressed a reluctance to operate out of a multi-use facility, Piers 3 and 9 are still desirable locations even if not operated as multi-use facilities due to their proximity to downtown. There are additional locations that could accommodate single operators, perhaps in a mixed use development.

- In allocating additional land for support services, consideration must be given to the need to accommodate boat repair facilities that can handle excursion boats.

II. IMPLICATIONS OF REGULATORY AND ENVIRONMENTAL ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The regulatory and environmental issues with the greatest potential impact on the excursion boat industry's demand for additional Port land relate to BCDC policies limiting automobile parking near the waterfront, and traffic impacts. The industry is also indirectly affected by the regulatory issues associated with dredge disposal because the only San Francisco facility available for repairs to boats of the size used by the industry is expected to close within the year if a solution to its dredging problem is not found. An additional environmental issue is the possible adverse impact on water quality caused by excursion boat activities that do not meet adopted water quality standards.

III. IMPLICATIONS OF FINANCIAL AND ECONOMIC ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The excursion boat industry paid the Port nearly $1 million in fees or rent in 1991. A recent study prepared for the Port estimated that excursion boat operators employ nearly 200 people, with a payroll of over $4 million each year. The total revenue estimated to be generated by ticket sales is estimated to be $20 million, with the City collecting over $600,000 in sales tax alone from ticket sales.

- The amount of additional land that is allocated for excursion boats depends upon how the Port can best maximize revenue from these uses. The Port controls most of the waterfront areas that would be suitable or desirable for excursion passenger loading and support services, with the exception of Pier 39 Harbor and South Beach Marina. The Port can either attempt to control the number of operators, thereby improving the profitability of the existing operators, or allow the market to determine the number of operators by soliciting competitive bids for development and operation of all of the feasible loading sites, subject only to land use considerations such as compatibility, parking, etc.

- The need for additional land, however, is partly contingent upon identifying a financing source or mechanism to fund new capital improvements for the industry. The industry representatives stated that they assume a lot of risk in commissioning the boats (excursion boats with capacity for over 500 people can cost more than $6 million.) Therefore, they conclude, the Port should assume some risk in constructing facilities. Industry representatives also stated that they would not be interested in funding capital improvements for a facility that they did not have exclusive rights to use. Typically, the Port uses rent credits against percentage rent to provide financing for major landside improvements, because it minimizes the Port's initial capital outlay for a project.

EXCURSION BOAT INDUSTRY PROFILE

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I. INTRODUCTION

This report will focus on excursion boat and recreational ferry operations at the Port of San Francisco. This profile includes the following elements:

> General market trends in the excursion boat and recreational ferry industry, including a discussion of the factors that may affect those trends, and the implications for San Francisco.

> Regulatory and environmental implications related to the excursion boat industry.

> Financial and economic conditions of the excursion boat industry. This section examines the general economic conditions in the industry and the financial considerations and operating issues related to the excursion boat industry.

> Existing conditions and proposed plans for accommodating the excursion boat industry in San Francisco. This section highlights the various operators on the Bay, describes the current type of operation each provides and profiles their docking and other landside facilities in San Francisco.

A set of concluding implications for San Francisco and a list of questions that the Advisory Board members may want to pose to the industry representatives is also attached.

A portion of the information provided in this report has been taken from the profile report on the commuter ferry industry (which was presented to the Waterfront Plan Advisory Board subcommittee on February 19, 1991). The two industries are closely related, due in part to the fact that recreational ferry riders utilize many of the commuter ferry facilities and operations in San Francisco.

II. GENERAL MARKET TRENDS IN THE EXCURSION BOAT INDUSTRY

Overall Market Trends

One of the major issues facing the excursion boat industry is the size and makeup of both the existing market and the future potential market. The Port plays a key role in this aspect of the industry in San Francisco due to the fact that most of San Francisco's waterfront is under either direct of indirect control of the Port.

The overall size of the excursion boat market in San Francisco is best represented by the number of vessels, operators and passengers. There are approximately 12 larger excursion boat companies operating in San Francisco, along with numerous smaller charter boats. These larger excursion boat companies command a total of approximately 30 vessels with a total passenger capacity of approximately 8,500. The total number of excursion boat passengers in San Francisco last year is estimated to exceed 1.5 million.

The Port must address its role in determining the number of excursion boat operators in the market, and the approach that it takes in making terminal and docking facilities available. The Port directly controls most of the waterfront areas that would be suitable or desirable for excursion boat passenger loading, with the exception of Pier 39 Marina and South Beach Harbor.

On the one hand, the Port could try to accommodate all interested parties, without taking into account the profitability of individual operators. This approach could involve promoting and actively courting new operators, as well as making numerous new facilities available for new and existing operators alike. The market would dictate the number and type of operators. (Of course, there are factors that would limit the Port's ability to make sites available such as parking, public access, and other pier uses. These issues will be addressed in Section IV "Description of Existing Operations").

Alternatively, the Port could establish a policy that would control the number and type of excursion boat and recreational ferry operators, based on some attempt at determining the appropriate size of the market and the number of operators that the market can support.

Within this larger context the Port needs to decide whether it should encourage smaller start-up operations, or whether it should focus more on supporting the existing large operators at the Port.

Overall Market Trends (continued)
The excursion boat industry in San Francisco is currently dominated by three large operators: Hornblower Dining Yachts, the Blue and Gold Fleet and the Red and White Fleet. Pacific Marine Yacht Charters, Rendezvous Charters and Commodore Dining Cruises are also significant operators. Together, these six companies make up the majority of the excursion boat and recreational ferry industry on San Francisco Bay.

There are numerous smaller yacht charters, but only one other excursion boat in San Francisco. The Franciscan, operated by Skyline Bay Cruises, is berthed at Pier 9 and picks up passengers at South Beach Harbor.

San Francisco's Position within the Bay Area
San Francisco is the focus of the Bay Area excursion boat industry. Most of the excursion companies are based in San Francisco and the vast majority of their passenger loading occurs here. Most of the excursion operators also pick up passengers and offer cruises departing from other locations outside of San Francisco such as Oakland, Berkeley and Marin County. San Francisco's role as the center of the excursion boat industry is due to the size and strength of the visitor industry in San Francisco.

Seasonality of Excursions
The excursion boat industry is seasonal, with peak business periods varying somewhat depending on the type of cruise (or the market segment). In general, the recreational ferry and sight-seeing tourist cruise market peaks sharply in the summer months when the visitor industry peaks, and the charter market seems to be stable throughout the year.

The luncheon and dinner cruise market also peaks during the summer, but stays much more stable throughout the year with the exception of January, February and March, when business falls off. The stability of the luncheon and dinner cruise market throughout the year is due to tourist activity in the spring and summer, convention activity in the fall and holiday activity during November and December.
The excursion business also fluctuates by day of the week, and time of day, with weekend afternoons and evenings the periods with the highest concentration of activity.

Segmentation of the Market

The excursion boat and recreational ferry industry in San Francisco is divided into four basic types of operations, each of which has its own characteristics. The following breakdown describes the characteristics of each market segment, and presents examples of each type of service. A more complete description of existing facilities and services is presented in Section IV "Description of Existing Operations".

1. Dining Cruises

This market consists of luncheon or dinner cruises that typically last from one to three hours. The primary characteristics of this segment of the industry are:

- reservations are normally made ahead of time
- most of the existing cruises either depart from the Pier 31-39 area or from South Beach Harbor
- the existing consumer base has a high percentage of upper income households
- the market is fairly heavily dependent on businesses and on conventions, as opposed to tourists

Examples of this type of operation in San Francisco are Hornblower Dining Yachts and Pacific Marine Yacht Charters.

2. Sight-seeing or tourist cruises

This market consists of pleasure cruises that typically last approximately one hour. Refreshments and snacks are usually available on board, but no meal is served. The primary characteristics of this segment of the industry are:

- the majority of the business is walk-up business, although reservations are taken for some of the most popular cruises, and package deals are offered for groups
- most of the existing cruises depart from the Fisherman's Wharf area
- the existing consumer base is drawn from all income groups
- the market is heavily dependent on tourists

Examples of this type of operation in San Francisco are the Red and White Fleet and the Blue and Gold Fleet in Fisherman's Wharf.

Relationship to the visitor industry

Visitors to San Francisco (both from the Bay Area and from outside the Bay Area) make up the majority of the customers for excursion boat and recreational ferry rides. However, the percentage of business provided by visitors varies by market segment within the excursion boat industry. The sight-seeing cruises rely almost exclusively on the visitor market, with heavy emphasis on visitors from outside the Bay Area who are in San Francisco for pleasure. This is also true of the recreational riders on commuter ferry runs. In contrast, the luncheon and dinner cruise operators and the small charter operators rely more heavily on Bay Area visitors, locals and convention visitors for their support.

Therefore, the extent to which growth in the visitor industry results in growth in the excursion industry varies by market segment. For example, growth in convention related visitors could result in growth in the luncheon and dinner cruise segment without growth in the sight-seeing or recreational ferry market segments. Conversely, if growth in the visitor industry is more the result of an increase in pleasure-related visitors, the sight-seeing and recreational ferry ridership should also increase.

This might explain why, despite overall growth in hotel related visitors to San Francisco during the past several years, total sales in the excursion boat industry have remained relatively flat with the notable exception of luncheon and dinner cruise operations. (See the table in Chapter III on Financial and Economic Issues).

IMPLICATIONS FOR SAN FRANCISCO

1. The point at which the market is "saturated" and cannot successfully support any more operators is difficult to determine. The Port must determine how it will approach its role in determining market saturation. There is evidence that certain market segments within the excursion boat industry are growing, which could produce opportunities for new operators.

2. Additional growth in passenger demand could be absorbed by additional capacity on existing vessels, to the extent that existing vessels have excess capacity.

3. Because of the size and strength of the visitor industry in San Francisco and its importance to the excursion boat industry, San Francisco will likely retain its role as the focus of the industry in the foreseeable future.

4. The seasonality and concentration of excursion boat activity on weekends, afternoons and evenings reduces the feasibility of the "shared" use of a common loading area. In other words, most or all of the operators need passenger loading space at approximately the same time, because of consumer preference and market demand, which could pose operational difficulties.

5. The different market segments of the excursion boat industry rely on different sources for their customer support (pleasures visitors, convention attendees, business travelers, etc.). Because of these differences, growth in the visitor industry may not result in equal levels of growth for each of the different market segments of the excursion boat industry.

6. Because the sight-seeing tour market is so dependent on the overall tourism industry and because of the major operator's high level of visibility in Fisherman's Wharf (which is the most frequently visited location in San Francisco), it seems likely that this market segment would grow at a rate comparable to the growth rate in the overall tourism market.

7. The luncheon and dinner cruise markets have the potential for additional growth, due to their support from Bay area residents and conventions/businesses. Additional lower priced lunch and dinner cruises have been considered by some operators, and it is widely felt that this lower priced market segment could be very successful.

II. REGULATORY AND ENVIRONMENTAL ISSUES

Public Access

Excursion boat operations by definition are considered public access to the Bay. However, BCDC would still require any new terminal built in San Francisco to maximize public access accommodations for the non-ferry riding public. This requirement was satisfied in the Golden Gate Ferry Terminal (which is primarily a commuter terminal), for example, by constructing a viewing deck at the second level that does not require the purchase of a ticket to access the space.

Parking

One of the major landside considerations associated with excursion boat operations is parking. For most types of cruises, most passengers arrive at the boat by private automobile, creating a demand for parking near the water. Existing BCDC plans and policies discourage parking over or near the Bay, even for water dependent uses such as excursion boats.

Environmental Review

Recent environmental analysis done on ferry terminals (which are similar to excursion boat facilities) have focused on such issues as the impact of increased vessel operations on water quality, the impact of constructing terminal improvements, pedestrian circulation problems around the terminal and traffic and transportation impacts. Any improvements to terminals in San Francisco will be subject to environmental review, and must comply with CEQA.

Americans With Disabilities Act

The Americans with Disabilities Act requires equal opportunities for access for disabled persons. These requirements apply to the ramping systems employed to get passengers on and off excursion vessels. Any new excursion boat passenger loading facility must be designed to comply with these requirements.

Implications for the Port of San Francisco

1. Excursion boat facilities in San Francisco should be accessible to the public. BCDC's primary design goal is to provide maximum feasible public access to the Bay in all development projects, whether they are maritime or not. While the nature of excursion operations does provide a great deal of access to the Bay, it is likely that more structured access would be required in any major new terminal facility.

2. According to existing BCDC plans and policies, parking should be allowed on existing piers to support acceptable maritime uses only if 1) there is no feasible upland alternative; 2) the parking placed on existing fill is the minimum amount necessary; and 3) the parking is located within an enclosed structure. This could present particular problems for excursion boat operations that rely substantially on customers who arrive by private automobile.

III. FINANCIAL AND ECONOMIC ISSUES

Overall Financial Issues

Overall, the financial condition of the excursion boat industry is fairly good despite the current economic recession. In combination the existing large operators at the Port have seen modest increases in sales volumes over the past five years. (Detailed sales and rent figures are presented on the following page). Although neither of the recreational ferry operators have seen significant increases in business over the last five years, Hornblower's luncheon and dinner cruise business has increased steadily over this time.

Several recent events are the cause of some concern about the industry.

1) Until very recently the Regina Del Mare had been in operation in San Francisco, berthing at Pier 28 and picking up passengers at the South Beach Marina. The operation was shut down by the U.S. Marshal for Federal income tax reasons. It appears that the Regina Del Mare operation ran into some financial difficulties.

2) Hornblower introduced a large new vessel into San Francisco late last year, intending to offer lower priced lunch and dinner cruises on the vessel. The boat has been sold to an out-of-state operator, and is therefore not in service in San Francisco. It is unclear to what extent this decision was market driven.

Operational Financial Issues

From the operators standpoint, the major financial characteristics of excursion boat operations are summarized below.

Capital Expenses: Constructing and furnishing vessels is the largest expenditure that excursion companies make. The newest large vessels constructed for use in San Francisco cost between $3.0 and $6.0 million. The other major capital expenditures are for docking, landing and other support facilities, which the Port has typically helped pay for through the use of "rent credits".

Rent credits are reductions in rent that are applied towards a predetermined amount of the capital expense that is to be recaptured. For example, the Red and White Fleet received a $1.5 million rent credit for improvements to Pier 41, and the Blue and Gold Fleet received a $1.8 million rent credit for their operation at Pier 39.

Operating Expenses: These expenses include fuel, food and beverage supplies, labor, and are normally fairly high in proportion to the revenues generated. In many aspects, excursion boats (especially lunch and dinner cruises) are very similar to restaurants, where cost of sales and operating expenses normally amount to 80% of gross sales. These expenses are typically proportionate to the amount of cruise activity that an operator engages in.

Port Expenses: The Port's direct revenue stream from the excursion boat and recreational ferry industry is generated from rental charges to operators that are typically based on a percentage of the gross revenue generated from ticket and concession sales on the vessels. The percentage for excursion boats ranges from 5% to 7% depending on the location and condition of the facility. These rates are comparable to those charged by other Ports on the west coast for excursion operations.

This approach to tenancies (or use of the Port's facilities for docking and loading passengers) is a standard approach for excursion boat operations, and is also widely used in leases for restaurants and other retail commercial ventures. This type of lease is appropriate for excursion boat operations because of the seasonality of the business. In other words, when business is slow the operator does not have a high rent payment to maintain. The percentage lease also allow start-up operations the ability to lower their early, start-up costs when their business volumes are low.

For the Port, the main advantages of a percentage rent lease with an established minimum rent is that the Port is protected on the "downside" by the minimum rent, and can participate in the "upside" through percentage rent.

Existing Operators Sales Figures

Excursion boat operators at the Port of San Francisco pay the Port a significant amount of revenue annually, based on their annual sales volumes. The three large operators paid the Port nearly $900,000 in rent combined last year. The gross sales volumes over the past five years of each major Port tenant (Red and White, Blue and Gold and Hornblower) is shown on the following page.

PORT OF SAN FRANCISCO EXCURSION BOAT TENANT SALES PERFORMANCE, 1986/87 - 1990/1991

	Red and White		Blue and Gold		Hornblower		Total	
Year /1	Gross Sales	Increase	Gross Sales	Increase	Gross Sales	Increase	Gross Sales	Increase
1986	$4,837,000	--	$3,865,578	--	$4,205,311	--	$12,907,889	--
1987	$4,644,305	-4.0%	$3,786,706	-2.0%	$5,045,367	20.0%	$13,476,378	4.4%
1988	$4,646,726	0.1%	$3,789,154	0.1%	$5,386,432	6.8%	$13,822,312	2.6%
1989	$4,082,522	-12.1%	$3,845,485	1.5%	$5,336,432	-0.9%	$13,264,439	-4.0%
1990	$4,725,389	15.7%	$3,726,023	-3.1%	$5,950,865	11.5%	$14,402,277	8.6%
Average Increase, 1986-1990	--	-0.6%		-0.9%		9.1%		2.8%

/1 The Blue and Gold sales figures are for calendar years, while the Red and White and Hornblower are for fiscal years starting July 1.

Source: Port of San Francisco

Other Financial Issues

As described in Section IV, many of the operators maintain separate facilities in San Francisco for the maintenance, repair and storage of vessels, office operations and alternative landing facilities. These areas along the waterfront generate monthly rent for the Port. As new vessels are introduced on the Bay, more space will be needed for storage and maintenance.

Contribution to the Local Economy.

The impact of the excursion boat industry in the local economy is dependent on the number of vessels and operations on the Bay. As a result, the ferry industry contributes to the local economy both directly and indirectly as described below.

Direct

> Fees or rent paid to the Port by the excursion boat companies of nearly $1.0 million in 1991.

> Employment of San Francisco residents by operators. A recent study prepared for the Port estimated that excursion boat operators at the Port employ nearly 200 people, with a payroll of over $4.0 million.

> Purchase of goods and services by operators. (No specific data available)

> Direct spending by passengers. The total revenues generated by these companies is estimated to be $20.0 million

> Direct spending by employees. (No specific data available)

Indirect

> Taxes collected by the City. For example, the City collected over $600,000 in sales tax alone from the estimated $20.0 million in sales.

> Jobs supported by excursion passenger spending and goods and service purchases (restaurants and bars, retail, entertainment, and other service jobs). (No specific data available).

Implications for San Francisco

1. Overall Operational Feasibility

Excursion boat operations have significant start up costs (including vessel acquisition and docking and landing facilities) and high operating costs. Nevertheless, excursion boat operations with high passenger volumes can be financially self supporting, pay for capital improvement costs and generate significant rental revenues for the Port.

2. Port Approach to Capital Investment Decisions

The Port has typically used rent credits applied against percentage rent as a method of providing assistance in financing major landside and dock improvements for excursion boat operators. In most cases the Port's facilities are not in usable condition, and the landside improvements must be made in order to operate excursion vessels. The provision of rent credits minimizes the Port's initial capital outlay for a project.

3. Use of Commuter Ferry Landing Facilities

The Port has secured substantial regional and state funding for capital improvements for commuter ferry facilities such as the North Ferry Terminal project at Pier 1/2 north of the Ferry Building. One of the conditions for using these funds, however, is that landing fees must be set in a manner as to favor commuter use.

Since the new landing facilities will be owned and operated by the Port, however, the Port has the flexibility to allow access to the dock by other operators during non peak times. The Port could potentially generate additional revenue by providing landing facilities for excursion boats and/or recreational ferries. The Phase II improvements at Pier 1/2 could be designed to maximize opportunities for excursion and off-peak access, if this is determined to be a goal of the Port.

4. Revenue Potential from Commercial/Ancillary Developments around the Terminal

Additional revenue could be generated by the Port from ancillary and related commercial development at or around excursion boat terminals. Several different types of commercial development could easily be linked to a terminal development and serve the needs of the passengers and the public. The Red and White Harbor Tour facility at Pier 41 is a good example of how ground floor commercial activity and upper floor offices can be incorporated into an excursion boat facility. The ground floor uses include ticket sales offices, passenger queuing areas, a gift shop and an ice cream stand and snack bar.

As mentioned above, additional storage space, stringer area, and offices will also be required to support new ferry vessels on the Bay. The Port of San Francisco could benefit from leases to operators for this support space, to the extent that such operators could pay market rents.

IV. DESCRIPTION OF EXISTING OPERATIONS

In San Francisco, excursion boat and recreational passenger ferry operations occur in a number of locations along the waterfront:

-- at the Ferry Building. The Golden Gate Ferry operates from the San Francisco Ferry Terminal behind the Ferry Building, and the Red & White and Blue & Gold fleets operate from Pier 1/2 just north of the Ferry Building.

-- at Fisherman's Wharf. The Red & White Fleet operates from Pier 41 and Pier 43 1/2, and the Blue & Gold Fleet operates from the northern marina at Pier 39.

-- between Pier 31 and Pier 39. Hornblower Dining Yachts operates from a dock between Pier 31 and 33, and Pacific Marine Yacht Charters operates out of the southern marina at Pier 39 (which is immediately adjacent to Pier 35).

-- at South Beach Marina. Rendezvous Charters and Skyline Bay Cruises operate from South Beach Marina, as did Regina Del Mare when it was in operation.

The various locations represent different aspects of the excursion boat industry in San Francisco. The Ferry Building functions primarily as a terminus for commuter runs to San Francisco, with recreational use normally occurring during off-peak hours. The Fisherman's Wharf area functions as the primary departure point for recreational tourist passengers. The area between Pier 31 and Pier 39 is currently the departure point for the majority of the luncheon and dinner cruises, although South Beach Harbor is the departure point for many of these cruises as well.

The following is a description of the major existing excursion boat operations at the Port of San Francisco.

Golden Gate Bridge, Highway, and Transportation District Ferry Operation

Golden Gate provides daily runs from the Ferry Building (at the San Francisco Terminal to the rear of the building) to Larkspur and Sausilito. Approximately 1.6 million passengers use this terminal annually. The major recreational use of Golden Gate's facilities occurs on the Sausilito run, where non-commuters actually outnumber commuters on an annual basis. The non-commute traffic is very seasonal, however, peaking in the summer with the tourist season.

The District operates four vessels on the two routes; MV San Francisco, Marin, Sonoma and Golden Gate. The Golden Gate vessel is the oldest of the four (it operates on the Sausilito run) and is scheduled for replacement within the next several years. In addition, the District is planning to purchase two additional vessels.

Golden Gate (continued)
The District built the San Francisco Terminal to the rear of the Ferry Building in 1978. The terminal provides landing space for two vessels at a time, with hydraulically controlled gangways to compensate for tidal changes. The terminal provides a protected waiting area (with bathrooms and vending machines) for approximately 400 passengers. The terminal also affords the public a viewing area for arriving and departing vessels from a second floor deck which can be accessed without entering the terminal. In addition, the District leases a portion of the northern stringer at Pier 1 for a protected berth during bad weather and overnight storage of a vessel.

Red & White Fleet Operations.

The Red & White Fleet operates the majority of its runs (to Alcatraz, Sausilito, Angel Island and Tiburon) from Piers 41 and 43 1/2 in Fisherman's Wharf. These runs are all recreational in nature with an annual passenger volume between 750,000 and 1,000,000. The Red & White Fleet also operates commuter service from Pier 1/2 to Tiburon and Vallejo, with annual commute passenger volume of approximately 300,000.

The Red & White Fleet operates from two separate locations within Fisherman's Wharf. The main departure point is adjacent to Pier 41 at Powell Street and the Embarcadero. This facility includes two floats, a two-story, 12,000 square foot building with ticket sales, passenger queuing areas and retail uses on the ground floor, and administrative offices on the second floor, and landscaped public open space. Red & White has a 40 year lease at this location that runs until 2015. The Pier 43 1/2 facility has docking facilities for three vessels, but only a small building for ticket sales. At this location, Red & White operates under a 25 year lease that expires in 2000.

The Red and White Fleet consists of the Catamaran, Dolphin, Bay Wolf, Royal Star, Royal Prince, Harbor Emperor, Harbor Queen, Harbor Princess, Harbor King and Royal Knight.

Blue & Gold Fleet Operations.

The Blue & Gold Fleet is based in Pier 39's northern marina, and provides mostly recreational runs around the Bay. Over the last year, the Fleet has also provided commuter service to the City of Alameda and the Port of Oakland from Pier 1/2 at the Ferry Building using Red & White's barge.

The Blue and Gold operation serves an estimated 300,000 recreational passengers annually from its Pier 39 location. Their facility consists of three floats and ramps and a very small building for ticket sales. The Blue and Gold facilities are under the Pier 39 lease, which runs until 2037. The Blue and Gold Fleet consists of the Golden Bear, Old Blue and Oski.

Hornblower Dining Yachts

Hornblower Dining Yachts operates from a float and ramp located between Pier 31 and Pier 33. Their facility also includes a 110 car parking lot and a small building used for ticket sales. Hornblower's 1990-1991 sales at the Port of San Francisco alone were nearly $6.0 million, with an estimated passenger count of approximately 150,000. Hornblower is on a thirty day license at Pier 31-33.

Hornblower's administrative offices are located on the Ferryboat Santa Rosa at Pier 3. The San Francisco Hornblower fleet includes the City of San Francisco, Empress, Commander, Admiral and Captain Hornblower. The Monte Carlo operated briefly from Pier 31 before it was sold to a Mississippi River operator.

Pacific Marine Yacht Charters

Pacific Marine has been operating out of Pier 39's southern marina since the fall of 1991. Prior to that, Pacific Marine operated from the Saint Francis and Belvedere Yacht Clubs. The Pacific Marine facility at Pier 39 consists of docks and ramps for three vessels: the San Francisco Spirit, California Spirit and Pacific Spirit.

Pacific Marine has a ten year lease with Pier 39 under which they pay minimum rent of $10,000 per month versus 5% of gross revenue for the first five years and 7% of their revenue for the second five years. Pacific Marine estimated gross revenues are over $3.0 million. In addition, Pacific Marine made approximately $100,000 to $150,000 in capital improvements. Under the terms of the master lease, Pier 39 pays the Port eight percent of gross revenue, or a minimum of $800 per month.

Operators Concerns

In 1990 the Port conducted a written survey of all excursion boat operators in San Francisco. As part of the survey, the respondents were asked to identify the importance of various aspects of the excursion boat industry. The percentage of respondents that listed the factors as either primary, secondary or no concern are shown on the following page.

RELATIVE IMPORTANCE OF FACTORS RELATED TO
EXCURSION BOAT OPERATIONS

Factor	Primary Concern	Secondary Concern	No Concern
Auto Parking	100%	0%	0%
Bus Parking	10%	60%	20%
Bus Drop-off	50%	30%	10%
Port Costs	70%	20%	0%
Availability of Walk-up traffic	30%	50%	10%
Availability of Mass Transit	20%	50%	20%
Passenger Demand	60%	10%	20%
Nearby Shoreline Activities	20%	50%	20%
Truck Catering Access	70%	20%	0%
Nearby Shoreside Tourist Activities	30%	30%	30%
Marketing	60%	0%	30%

The two major facility-related points that the survey brought forth concerned berthing and passenger loading, and parking.

Berthing and Passenger Loading Facilities

The majority of excursion boat operators berth their vessels at the same location at which they load passengers. The majority operate from locations at which they have exclusive berthing and passenger loading rights. When queried about a multiple user facility, the majority of operators stated that they would consider utilizing this type of facility, although most would not expend capital funds for such a facility.

Parking

The majority of excursion boat passengers arrive at the dock by private automobile or bus. Parking requirements vary substantially by type of operator, with sight-seeing operators requiring fewer parking spaces because of their reliance on tourists who are less likely to arrive by automobile, and lunch and dinner operators requiring more parking spaces because of their reliance on local residents and businesses who are more likely to arrive by automobile

New Locations for Excursion Boats

After several operators approached the Port about developing additional excursion boat passenger loading areas over the past several years, the Port analyzed new locations for excursion boat facilities. The physical condition of all potential locations was assessed, and the survey profiled on the previous page was conducted to determine the operator's needs and concerns.

The locations that were considered included Pier 31, Pier 17-19, Pier 9, Pier 3, Pier 1 and Pier 28. All of the piers have advantages and disadvantages for excursion boat operations. Based on the analysis done, it was determined that the south sides of Pier 3 and Pier 9 were the most appropriate locations for new excursion boat passenger loading areas for the near term. The major reasons for selecting Pier 3 and Pier 9 are summarized below.

1) Both Pier 3 and Pier 9 are in relatively good structural condition, and do not need substantial repairs;

2) Pier 3 could potentially accommodate excursion related parking on the pier on a short term basis, and there is parking near Pier 9 (on SWLs 324, 323 and 321);

3) The piers are in a desirable location for the excursion boat operators; and

4) Pier 9 offers good visibility from the street, which is important to some operators.

As previously mentioned in this report, the concept of a centralized, shared use passenger loading dock has previously been considered. Due to the size and complexity of such a project, the Port has chosen instead to offer exclusive docking and loading space to individual operators for the near term. Most of the existing operators have stated that they would consider using a multiple user facility, but that they would not be willing to invest in constructing the terminal. Thus, a multiple user facility remains a possibility over the long term, but no means of financing the construction of such a facility has been identified.

Implications for San Francisco

1. Locational Differences in Operations

The excursion operations in San Francisco are generally located in clusters, with the location of the cluster depending on the type of operation. These locational requirements are primarily driven by the operators and their desire to be close to their primary market segment. These requirements will affect the future land use designations that are made for the excursion boat industry.

In the survey conducted with the operators, they expressed a consistent preference for the Pier 1 through Pier 9 area for new excursion boat facilities.

2. Operator Concerns

The existing excursion boat operators in San Francisco are most concerned about availability of automobile parking, truck catering and loading access, Port costs, marketing their business and passenger demand. It is important for the Port to address these concerns in planning for additional excursion boat facilities.

3. Multiple User Facility

There would be some advantage in utilizing common passenger loading areas, due to economies of scale. However, due to the peaks in the business at night and on weekends, there is some question as to how much of an advantage a shared facility would provide. Also, a funding source for the construction of the facility must be identified since operators are reluctant to make a speculative investment in a shared facility.

4. Parking

Parking requirements are greater for luncheon and dinner cruises than for sight-seeing cruises or recreational ferry riders. Any future excursion boat facilities designed for luncheon or dinner cruise operators must take into account the need for adequate parking facilities.

5. Access for Excursion Boats to Pier 1/2

In the past, the Port has granted individual commuter ferry operators an opportunity to lease portions of the waterfront around the Ferry Building for installation of privately controlled landing facilities i.e., Golden Gate Transit and Red & White. The operators were allowed exclusive landing rights at their facilities, forcing other operators and communities wanting commuter service to negotiate landing rights with operators holding leases.

5. Access for Excursion Boats to Pier 1/2 (continued)

This type of arrangement has become impractical because of lack of sufficient waterside area to accommodate all probable operators, and landing fees set by the leaseholder that were too high to encourage new commuter oriented service. The Port has embarked on a terminal up-grade program at Pier 1/2 which will result in a publicly operated, universally accessible terminal.

As previously discussed, the Port's control of the facility will allow the flexibility to offer this facility to excursion boat or recreational ferry operators when not needed for commuter use. However, lack of available parking and traffic congestion could create problems in utilizing Pier 1/2 for excursion boat activity. The funding source for the Pier 1/2 improvements has some restrictions on the use of the terminal for non-commute purposes.

6. Need for Additional Water Dependent Support Space

From the above descriptions of existing operations, it is clear that as operators come on-line, or expand the number of vessels they operate, additional stringer and ancillary space may be necessary for storage, and vessel repair. The extent to which this support space should be provided in San Francisco deserves further analysis.

Questions for the Advisory Board

The following questions summarize the issues associated with the operation and development of excursion boat facilities that must be addressed as part of the land use planning effort.

1. Do the overall trends in the Bay Area excursion boat industry indicate that significant new terminal improvements will be supportable or required? Based on these trends, how much land should the Port reserve for excursion boat operations?

2. More specifically, do the trends within each segment of the industry indicate the potential for more or less demand for different types of excursion operations, and what would be the corresponding needs of the different market segments?

3. Given other factors outside the Port's control, such as the market forces affecting the overall tourism industry in San Francisco, how should the Port approach land use allocation decisions for the excursion boat industry ?

4. What would be the advantages and disadvantages of developing a central, commonly used excursion boat terminal?

5. How should the parking needs of the excursion boat industry (and particularly the luncheon and dinner cruise market) be addressed?

6. What are the opportunities for incorporating public access at existing and future excursion boat terminal facilities?

7. What is the desirability of incorporating commercial uses into excursion boat terminal facilities to provide for passenger amenities and to produce additional revenue to offset the operational costs of the terminal facility?

8. How compatible are commuter and recreational ferry operations ? Can both operations be accommodated at the same terminal ?

ANNUAL FERRY RIDERSHIP TRENDS: SAN FRANCISCO BAY AREA

System Peak/Off-Peak	1986	1987	1988	1989	1990
Golden Gate -Larkspur					
commute	471,153	547,046	615,401	672,332	788,600
non-commute	254,684	299,332	270,485	265,602	308,294
Golden Gate-Sausalito					
commute	126,605	127,666	161,458	193,816	204,222
non-commute	426,661	462,161	404,738	362,995	322,403
G. Gate - Total	1,279,103	1,436,205	1,452,082	1,494,745	1,623,519
Red & White-Sausalito					
non-commute	367,097	380,131	383,614	350,301	364,832
Red & White-Tiburon					
Commute	195,899	224,283	223,092	207,397	185,305
non-commute	70,080	71,298	77,623	70,316	82,064
Total	265,979	295,581	300,715	277,713	267,369
Vallejo **					
Commute	22,208	88,083	102,723	165,649	153,299
non-commute	101,866	155,788	136,748	118,689	131,810
Total	124,074	243,871	239,471	284,338	285,109
Oakland-Alameda ***					
Commute					157,000
non-commute					45,000
Total				307,000	202,000
Total Ferry Trips	2,036,253	2,355,788	2,375,882	2,714,097	2,742,829
Annual % Increase		16%	1%	14%	1%

** Vallejo service started in mid-1986

*** Oakland/Alameda service started in October 1989 following Loma Prieta Earthquake

Questions for the Industry Representatives

1. Do you feel that your segment of the market is "saturated", or do you feel that there is potential for additional excursion activity?

2. How do you feel about utilizing a multiple user passenger loading terminal? What, if any, are the potential disadvantages or problems with this type of facility?

3. If you could design an ideal terminal, what would you include as improvements in the facility? What type of passenger amenities would be desirable?

4. What type of support services does the excursion boat industry need? Is there sufficient space and accommodations in San Francisco? Is the industry typically able to pay market rent for support space?

5. What other land use activities are compatible with the operations of the excursion boat industry that might produce revenue? Any commercial facilities? Any additional waterside activities?

6. Can commuter and recreational ferries use the same terminal?

7. How important is parking to your operation? What options would be acceptable to you given BCDC restrictions on parking?

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SUPPORT SERVICES FOR THE CRUISE SHIP INDUSTRY, EXCURSION BOATS, PASSENGER FERRIES, SMALL BOATS, AND HISTORIC SHIPS

I. INTRODUCTION

This report profiles businesses and uses that provide support services for the Cruise Ship Industry, Excursion Boats, Passenger Ferries, Small Boats and Historic Ships ("prime industries") at the Port of San Francisco, including:

Ship Chandlers
Equipment Storage and Repair
Warehousing, Distribution, Consolidation and Processing
Foreign Trade Zone
Dredging
Moorage and Anchorage
Tug and Tow Operations
Bar Pilots
Boat Repair and Launch Services
Transportation Services
Employee and Customer Parking

This profile report contains the following components:

. General market trends for the Support Services are presented, including a discussion of the factors that may affect those trends, and the implications for the Port of San Francisco.

. Regulatory issues and environmental implications associated with Support Services are identified, such as the Regional and local land use regulations, and opportunities for improving public access. Environmental issues, and the process for review and analysis of those issues, will be addressed.

. Financial and economic issues are discussed to the extent pertinent to Port of San Francisco decision making.

. Existing Support Services on Port property are described, and the suitability and sufficiency of those facilities to support current usage and future requirements is also discussed.

. The issues associated with the Support Services that must be addressed as part of the land use planning effort will be summarized. In addition, a list of questions that the Advisory Board members may want to pose to industry representatives is attached.

II. MARKET TRENDS FOR SUPPORT SERVICES

A. Demand for Land and Facilities for Support Services

Demand for the Support Services that are required by the prime industries will depend on the growth prospects of the industries that they serve. The profile reports on the prime industries indicated (1) high growth potential for the Excursion Boat industry; (2) potentially substantial increases in Ferry service to San Francisco, depending upon the availability of subsidies for the industry; (3) the Cruise Ship industry is not expected to grow significantly, barring amendments to the Federal Jones Act, (4) the trends for small boat ownership show minimal growth in the short run, although there is unmet existing demand for facilities, and (5) with respect to Historic Ships, the intention expressed at the workshop was to concentrate on the needs of the existing fleet as opposed to undertaking an expansion program.

Demand for Port land and waterfront access areas to accommodate the businesses that provide support services is not simply a function of the growth prospects in the prime industries, but also reflects the availability of privately owned facilities that serve as an alternative to locating on Port of San Francisco property. Some of the businesses that provide support sevices are water-dependent, and thus must look to the Port primarily for land and facilities (e.g. tug and tow, bar pilots, boat yards.) The Hunters Point Naval Shipyard and a few privately held waterfront locations are the only possible alternatives to the Port for water-dependent Support Services in San Francisco.

For those Support Services that are not strictly water-dependent there is the possibility that those uses can be located off Port property. However, other types of land uses (primarily high value commercial and residential uses) compete for the same limited land and facilities. This competition is particularly acute for those businesses that, while not truly water-dependent, must be close to the water-dependent prime industries in order to operate efficiently (e.g. Some types of equipment storage and repair facilities.) For example, the recent rezoning of the 300+ acres in the Mission Bay area from light and heavy industry to residential and commercial uses will ultimately displace a number of Support Service businesses, including various cargo sourcing and warehousing operations as well as transportation companies. The northern waterfront area is also subject to intense competition between uses for scarce land, leading to problems for

businesses requiring parking for employees and customers. In addition, even where Support Services are located on land reserved for industrial or port priority use, they may be under pressure due to incompatibility with encroaching commercial and recreational land uses.

A report prepared as part of the Mission Bay project identified existing maritime related establishments, including ship repair, ship maintenance/servicing, cargo handling and storage, intermodal transport, and freight forwarding and consolidation services in the area. While many of the businesses in the Mission Bay area tend to serve the Cargo Shipping industries more than the the prime industries addressed in this profile report, the displacement of those businesses from Mission Bay will likely result in increased competition for land and facilities for Support Services generally. The report included the following chart:

Business Activity	Number of Businesses	Employment
Transportation	18	497
Warehouse and Distribution	5	32
Vehicle and Equipment Storage	4	3
Manufacturing Construction	4	108
Offices	8	39

Source: Existing Land Uses/Employment, Dept. of City Planning, September 1986.

The prime industries' requirements for Support Services vary to a certain extent. The following discussion focuses on each of the prime industries to highlight the key issues and trends with respect to the businesses that support these industries:

Cruise Ship Industry:

As discussed in the profile on the Cruise Ship Industry, and at the related workshop, the industry is not expected to grow significantly, unless the Federal Jones Act is amended. Thus, this prime industry will not likely contribute to significant increases in demand for the Support Services that it requires. However, Cruise Ships require many of the same types of services required by the Cargo Shipping industries, which are expected to generate increased demand for Support Services. Thus, the Cruise Ship industry, too, may be affected by the impact on Support Services as a result of increased demand and a decrease in the available

industrially zoned land to accommodate those businesses.

Cruise Ships require Bar Pilots to guide them from the sea bouy to the pier, and tug and tow operators to assist the ship into the berth at Pier 35. In addition, Cruise Ships generate a lot of business for Ship Chandlers, and in turn the Foreign Trade Zone, for food, liquor, parts, supplies and materials. The availabilty of the Foreign Trade Zone allows the Cruise Industry access to duty-free liquor, providing a significant cost savings to the Industry. There are a number of Ship Chandlers on Port property in the Fisherman's Wharf area, and other locations. These uses do not require direct water access, but they prefer locations in close proximity to the industries that they serve. The Cruise Ship Industry also relies on transportation services for provisioning ships, and transporting customers.

The Cruise Ship Industry is also a potential client of the Ship Repair industry at the Port of San Francisco.

Excursion Boats

As discussed in the profile report, and in the workshop on the Excursion Boat Industry, there is significant growth potential for this industry over the longer term. With respect to the Support Service requirements of this industry, particular emphasis was placed on the need for boat repair facilities to accommodate these medium sized boats.

There are only four facilities in the Bay that can "haul out" excursion boats for bottom work or substantial repairs. These facilities are (1) Donco at Hunters Point (which has access problems because of low water depth, (2) Stones in Alameda, (3) Bay Ship and Yacht in Richmond, and (4) Fulton in Antioch. In addition, some of the larger ferry operations have used the dry dock facility at Pier 70, which can accommodate three large boats at one time. However, the dry dock is very expensive to operate, and not all excursion boat operators could afford to have as many as three boats out of the water at one time. The SF Boatworks, a boat yard facility located on Port property , expressed an interest in expanding into this area eventually. Additional facilities would be required at that location to accommodate the medium sized excursion boats.

Excursion boat representatives also agreed that there was a need for additional moorage and passenger loading areas between the Bay Bridge and Fisherman's Wharf. This type of use is more in the nature of a direct industry facility, rather than a Support Service. The excursion boat industry also uses the services of the Ship Chandlers, as well as Transportation Services for supplying the boats and transporting large customer groups.

Finally, industry representatives expressed a need for adequate parking for their clientele. Noting that many cruises do not end until late in the evening, public transit was not considered a viable alternative for the customers. Because so many of the excursion boat businesses are concentrated in the Fisherman's Wharf area, it will be very difficult to address this problem, given the demand for parking associated with so many other uses at that location. If plans for a consolidated facility are pursued, or new moorage and loading areas are identified, access to parking should be given careful attention.

Passenger Ferries

The profile report and workshop session on the Passenger Ferry industry indicated long term growth potential for the industry, assuming that public transit subsidies continue to be available. The principal support services required by the Ferry Boat businesses were adequate facilities to store equipment in close proximity to their dock, and, like the excursion industry, access to boat yards that can accommodate these larger vessels. Because the Ferry Boats have terminals at various points around the Bay Area, it is possible that these needs do not have to be provided for solely by the Port of San Francisco. The Ferry Boat services do not provided on-site parking at any locations in San Francisco. The Port provides storage and layover facilities for Ferry Boats at Pier 1, Pier 9, and Pier 24.

Small Boats

The profile report and workshop session on small recreational boats indicated that boat ownership is not expected to rise significantly in the near term, although increased demand could be expected as the local population ages and has more leisure time and money. However, there is current unmet demand for facilities from the existing boating community. In particular, the boating representatives identified a need for (1) additional moorage areas, particularly near restaurants and public attractions, (2) additional berths for boats under 25 to 30 feet, (3) dry storage facilities and more public ramps for trailerable boats, which represents the largest segment of small boat ownership. These Support Services were addressed at the profile and workshop session on small boats, along with a discussion of boat clubs and small boat yard and repair facilities. The issues raised at that time will be addressed further as part of the preliminary plan at the conclusion of Phase I.

Historic Ships

At the workshop on Historic Ships there seemed to be consensus that the National Park Service should concentrate on addressing the needs of the existing fleet of historic vessels, instead of focusing on expansion programs for additional vessels. The Support Service needs of the Park Service with respect to historic ships differs from that of the other industries because these ships require special materials and repairs due to their historic status. For example, the Park Service cited a need for a large area to age oak for use in ship repair.

A critical need identified by the Park Service was for warehouse and museum space to house the collection of maritime artifacts. Again, the space requirements for this use differ from the warehousing needs of other industries. The importance of having such a facility in close proximity to the ships was emphasized, as was the need for museum display space, in addition to traditional storage. There was considerable debate at the workshop session as to the appropriate location for the new facilities, with the Park Service evidencing a bias to remain at Fisherman's Wharf, and a citizen's group encouraging relocation to Pier 46B at China Basin . The Park Service is undertaking a general business and facilities planning effort for the historic ships, and the plan will address the locational issues.

B. Implications for the Port of San Francisco

To the extent that the growth in the prime industries depends upon an adequate supply of providers of Support Services, the Port must attempt to meet the demand for land and facilities for these businesses, whether driven by prime industry growth or lack of appropriate facilities elsewhere in the City.

The Port's efforts in this regard will be challenging because many of the Support Service businesses vie for land that will also be needed to meet the long term needs of the prime industries. In addition, many of the Support Service businesses can not afford to pay competitive rent for their facilities, whether to the Port or a private landlord. The Port will have to take into consideration the secondary financial benefits associated with these uses in making decisions about how to allocate scarce land resources.

The fact that many of the Support Services are water-dependent uses limits the options available to the Port. For the uses that are not water-dependent, the Port may look to the City for assistance in providing protection through land use controls to preserve industrial sites, or by allocating a portion of the Hunters Point Naval Shipyard for maritime Support Services.

However, there are some Support Service uses that while not strictly water-dependent require locations in close proximity to the prime industry, such as storage for Ferry boat equipment.

It is not possible to project with accuracy the precise future land use needs of the businesses that comprise Support Services. Over time, changes in the organization of Support Service businesses and the way the prime industries use them could lead to efficiencies that could affect space and locational requirements. In addition, there may be changes in the future that would improve the ability of Support Services to compete for land. Because the precise needs of Support Service business can not accurately projected, the Port's land use plan should incorporate flexibility. The Port should establish a framework for decision making, which adequately considers the direct and indirect financial consequences of land allocations between the prime industries and Support Services, as well as other appropriate land uses.

III. REGULATORY AND ENVIRONMENTAL ISSUES

A. Regulatory Issues

For purposes of the Port's land use planning effort, the principal regulatory issues associated with the future of the Support Services include (1) compliance with Bay Conservation and Development Commission (BCDC) policies, (2) City Master Plan and zoning ordinance provisions affecting the availability of industrial uses, and (3) opportunities for public access.

1. Compliance with BCDC Policies

With respect to the land use requirements associated with Support Services, the uses most likely to involve issues of compliance with BCDC policies are (1) any proposed long term Support Service use in an area designated for near term marine terminal use or development, (2) any proposed long term Support Service use in an area designated for Port Priority use, if the support service does not satisfy the requirements, and (3) employee and customer parking on the waterfront that exceeds the minimum required or that otherwise could be provided in an upland location.

There are numerous instances where these issues have and could arise. For example, parking is an acute problem at Fisherman's Wharf, and compliance with BCDC policies may be an issue in any proposed solution to accommodate more customer and employee parking. Another example is provided by the Ship Repair and

Warehousing uses at Pier 50, which must be considered interim uses because Pier 50 is designated as a near-term marine terminal development site, unless and until the conditions established by BCDC for eliminating that designation are satisfied. In addition, any new Support Service use located over the water would have to demonstrate that it was a water-related use. While this would not be an issue for many Support Service businesses, businesses that have a mixed maritime and non-water related clientele, such as some transportation services, might have to address this issue.

2. City Master Plan and Zoning Ordinance

Because the Support Service uses must look for land and facilities off Port property, the City's actions on Master Plan and zoning amendments for existing industrial areas must be given careful scrutiny by the Port. Particular attention should be given to the South Bayshore planning effort now underway, as well as the planning work that will establish the new use of the Hunters Point

Naval Shipyard (if the City takes over that land.) The former Navy Shipyard could be especially appropriate for the Support Services that require water access and rail access. In addition, the proximity of the Naval Shipyard to existing Port container terminals makes it an ideal location for accommodating uses displaced from the Mission Bay area. While there are many other uses vying for that property on a long term basis, considerable thought should be given to reserving some of the land for Support Services, and possibly prime industry uses, that would be compatible with other uses at the site.

3. Opportunities for Public Access:

For those Support Service uses located on the water, such as the Bar Pilots and Tug and Tow operations, efforts should be made to identify opportunities for public access. Although this may be difficult due to the nature of the operation and space constraints, these facilities could offer opportunities for the public to view a "working waterfront." This issue will be explored with the industry representatives at the workshop session in an effort to identify specific locations where public access could be accommodated.

B. Environmental Issues:

Environmental issues associated with the support services principally involve water quality implications from direct water use, as well as from storm water runoff from land side operations. Some uses, such as those provided by H & H Ship Service require special attention because of the hazardous nature of the materials involved. Transportation services such as freight forwarders and trucking companies raise issues of traffic and air quality. If those uses are forced further away from the prime industries, there may be adverse environmental consequences as a result. In addition, small boat yards work with toxic materials that could pose a hazard to health and the environment if not properly managed. The Regional Water Quality Control Board recently announced an initiative to bring small boat yards around the Bay into compliance with regulations governing those uses.

The Waterfront Plan EIR will identify and analyze the environmental implications of the possible alternative locations for Support Service uses.

IV. FINANCIAL AND ECONOMIC ISSUES

A. There are a number of financial implications associated with the Port's efforts to ensure adequate land and facilities for Support Service businesses. The Port must achieve balance between accommodating the land use needs of both the prime industries and the Support Services. Although the Support Service uses in general generate lower revenues for the Port than the prime industries, the availability of the Support Services to the prime industries accounts, in part, for the revenue generated by the prime industries.

The chart on the next page shows some of the Support Service tenants of the Port, and the minimum monthly rental paid. Some of these activities generate significant rents for the Port, including the Parker Warehouse (cotton) at $14,583 per month, the Foreign Trade Zone (a duty-free warehouse) at $17,069 per month, and the Bar Pilots at $14,851 per month. However, nearly two-thirds of the businesses included on the chart pay less than $5,000 per month in rent to the Port.

The Port does not have data on the rent levels for industrial Support Services located off of Port property. One can assume as a general rule that these uses generate less return than would commercial or residential uses on the same land. In addition to potential competition for industrial sites from non-industrial

FINANCIAL AND BUSINESS CONDITIONS

PORT TENANT	TYPE OF USE	LOCATION	MINIMUM MONTHLY RENT
Bay & Delta Towing	Tug & Tow	15	$2,132
Bay Area Tank & Marine	Equipment Repair	80 & 92	$5,000
Christy Truck Lines	Trucking	SWL 337	$960
Coast Marine & Industrial	Chandler	SWL 302	$5,991
Colma Drayage	Tug & Tow	SWL 340	$4,836
Esprit	Cargo Distribution	SWL 343	$4,647
Foreign Trade Services	Foreign Trade Zone	19-23	$17,069
Golden State Marine	Marine Contractor	26	$2,270
H & H Ship Services	Waste Oil Processing	62 SWL 337 SWL 349	$14,851
HSF Enterprises	Cargo Salvage/Dist.	46B	$3,300
J & H Marine Industrial	Chandler	SWL 337	$6,021
John's Fork Lift	Fork Lift	80	$203
Konmatsu, USA*	Container Sourcing	SWL 337	$7,500
Maskell Marine Services	Chandler	SWL 303	$6,656
Metropolitan California	Stevedores, Equipment Storage/ Repair	80	$7,978
Nicholson's Precision	Marine Contractors	SWL 349	$2,378
O.C. Transport	Cargo Process/Dist.	SWL 337	$1,144
Pan Marine Contractors	Marine Contractors	33	$1,786
Parker Warehouse	Cargo Sourcing	15-17	$14,583
Podesta Divers	Salvage/Construction	26	$1,885
Royal Charter Marine	Tug & Tow	46 & 54	$4,831
Shaver, Harry	Tug	3	$129
S.F. Bar Pilots Assoc.	Bar Pilots	9	$17,638
Slackwater Towing & Salvage	Towing & Salvage	9	$312
U.S. Customs Service	Customs	80	0
Underwater Resources DBA	Marine Contractors	26	$1,163
Westar Marine Services	Tug & Tow	46B	$1,534
Western Rim Company	Coffee Warehouse	50	See Note
Willard Marine Decking	Marine Contractors	62	$3,443

* Currently in lease negotiations with the Port.

Note: Wharfage and dockage revenues for Western Rim Company are estimated to be $35,000 annually.

Source: Port of San Francisco (April, 1992)

uses, the Support Services must compete for scarce land and facilities with other industrial and warehousing uses in the City, some of which are more lucrative than maritime-related activities.

At present, the Port is able to accommodate the land use needs of both the prime industries and Support Service businesses. However, as demand increases with growth in the prime industries and the supply of off-Port land declines as the Mission Bay project is implemented, the Port will face tough choices in deciding how to allocate its facilities.

B. Economic Issues

There are no comprehensive studies available of the economic impacts of Support Service businesses. However, the Mission Bay project analysis of Existing Land Uses/Employment provides some insights into the employment, wage levels, and worker characteristics of maritime related Support Services. As noted above, the Mission Bay Project Area has 39 maritime related establishments including transportation services, distribution and warehousing, vehicle and equipment storage, manufacturing and construction, and office uses. These 39 business have 679 employees, with nearly 500 of these jobs in the transportation services alone. Extrapolating from the survey of all businesses in the area, these industrial based jobs tend to pay higher wages than other types of employment, possibly due to union contracts. In addition, the report noted that nearly 50% of the employees of existing businesses at Mission Bay were San Francisco residents, thus representing the possibility of further economic benefits to the City associated with those jobs.

The Mission Bay study was not able to determine where these businesses will relocate to as the Mission Bay project is implemented. Given the relative lack of industrial zoned property in the City it is likely that many of these concerns will relocate outside of the City. The Port, and the City, will have to make an effort to accommodate those businesses whose presence near the Port contributes to the efficiency and attractiveness of the Port.

C. Implications for the Port of San Francisco

Given the current levels of business activity, the Port has had little difficulty in accommodating the land use requirements of both the prime industries and Support Service businesses. In the short term, the only financial issue which this land use allocation approach raises is whether facilities devoted to maritime Support

Services might yield more revenue in a commercial use, with those funds then being available for capital improvements necessary to the growth of prime industries.

Over the long term, the Port will face tougher choices in allocating land and facilities. With growth anticipated in some segments of the prime industries, and with a decreasing supply of off-Port industrial lands, competition for facilities will increase. Demand for large facilities with good water and/or road and rail access, where industrial uses are appropriate, is likely to increase the most because of the high growth potential in cargo shipping prime industries. The Support Services for cargo shipping are also the most likely to be adversely affected by the implementation of the Mission Bay project. As displaced Support Service businesses compete for new locations, all Support Service businesses could be adversely affected.

Another related financial issue that will become more of a concern over time is that of rising maintenance costs for some of the facilities currently rented to Support Service businesses. Although some of those businesses pay significant amounts of rent, it is unlikely that most of the Support Service businesses could support the cost of major substructure repairs to the finger piers. Fortunately, a number of the facilities that are occupied by Support Service uses are on upland Seawall lots, or are located on Piers that are in fair condition. For those facilities currently in need of substantial repair, such as Pier 24, however, future use for Support Service activities is unlikely unless the repair costs were heavily subsidized by the Port.

V. EXISTING FACILITIES AND OPERATIONS

A. Description of Support Service Activities

The chart at the end of this report identifies the types of Support Services used by the various prime industries. The following section describes the types of facilities and operations that support the water-dependent industries at the Port of San Francisco.

1. Chandlery

Chandleries are stores that offer a variety of marine equipment and supplies to ocean-going cargo and cruise ships as well as small boats. In addition, they also supply provisions, such as foodstuffs, for cruise ships. While these businesses are not water-dependent, they do prefer a location close to that of the

prime industries they serve. Chandlers located within the Port's jurisdiction include Maskell Marine Services (Seawall Lot 303) and Coast Marine and Industrial (Seawall Lot 302) in the Fisherman's Wharf area and J & H Marine Industrial in the Central Waterfront area near Piers 48 and 50.

2. Equipment Storage & Repair

Businesses that provide equipment storage and repair facilities vary depending upon the prime industry they serve. For example, the Ferry Passenger boats require some amount of storage and repair facilities adjacent to the boat dock. Historic Ships require specialized storage areas for aging timber, and displaying maritime artifacts. With the exception of small boat repair facilities, these businesses and uses are not water-dependent in nature. However, at least some facilities for storage and repair should be located on or adjacent to the prime industries.

3. Warehousing, Consolidation, Distribution, & Processing

These businesses provide space primarily for cargo storage, container stuffing and sourcing operations, re-distribution of cargo, and processing of neo-bulk cargo, such as automobiles. With the exception of transit sheds that provide interim storage of cargo near ocean-going terminals and "mast-up" storage facilities for sailboats, these types of uses are not water-dependent.

However, some warehousing and distribution facilities must be accommodated on or near Port property. For instance, the National Park Service requires warehouse space of maritime artifacts that would double as display or museum space. That type of facility should be located close to the waterfront area where the ships are berthed.

4. Foreign Trade Zone

The foreign trade zone is a warehouse where cargo can be stored, altered, or repaired duty-free. Even though this use is not water-dependent, it must be sanctioned by the Port. The foreign trade zone provides an important service to ship chandlers and the cruise industry , because goods with high tariffs, such as liquor, can be purchased duty-free for use by outbound ships at this facility. Located in Piers 19-23, Foreign Trade Zone #3 is operated by the Foreign Trade Services.

5. Tug & Tow Operations

These businesses serve the ocean-going ships by assisting the ships into berths, as well as towing disabled ships. They are water-dependent uses and can be located anywhere on the Bay. However, at least some of these operations should be located in proximity to the prime industries in San Francisco. Tug and tow operations are scattered along the San Francisco waterfront. They include Slackwater Towing and Salvage on Pier 9, Bay & Delta Towing on Pier 15, Royal Charter Marine on Piers 46B and 54, Westar Marine Services on Pier 46B, Colma Drayage on Seawall Lot 340, and Harry Shaver's tug offices on Pier 3.

6. Bar Pilots

All ocean-going ships must be guided through the harbor by bar pilots. The pilots guide the ships from the sea buoy to the pier. This water-dependent use is represented by the San Francisco Bar Pilots Association, which operates out of Pier 9.

7. Dredging

By their nature, dredging operations are water-dependent. However, dredging companies can be located at any port within the Bay, and are not presently tenants of the Port.

8. Moorage & Anchorage

Moorage and anchorage uses are, of course, water-dependent. They are used by tankers waiting to lighten their loads to allow them access to Richmond and Benicia. The anchorage area is designated by the Federal government. Moorage is also required by pleasure crafts, for short term visits to City restaurants and attractions. During the herring season, fishing boats "raft" or moor along the waterfront if berthing space is unavailable.

9. Boat Repair & Launch

These facilities are water-dependent. Boatyards serve small to medium-sized boats with waterfront facilities that permit top-side repairs and "haul-out" repairs to the bottom of the boats. Launch facilities allow small trailerable boats access to the Bay. The Profile of Boat Clubs, Boat Yards and Small Boat Services (April 7th workshop) provides a discussion of boatyards and launching facilities in San Francisco.

10. Transportation Services

Trucking companies provide important support functions to the prime industries at the Port. While Christy Truck Lines is the only trucking company that is currently located within Port jurisdiction (Seawall Lot 337), there are a number of transportation-related companies located in the Central Waterfront area that will be displaced due to the Mission Bay Project. While transportation services are not water-dependent in nature, they do provide a valuable service to many water-dependent industries.

11. Employee & Customer Parking

Facilities for employee and customer parking are not water-dependent, but must be provided on-site or in close proximity to the prime industry. Parking is a principal concern for the fishing and excursion industries in San Francisco due to high levels of congestion in the northern waterfront. However, automobile parking is an issue that affects all of the prime industries because of competition for scarce land and BCDC regulations regarding parking on the waterfront.

12. Miscellaneous Services

While not water-dependent in nature, there are numerous specialized providers of marine-related services in San Francisco. These include underwater salvage and construction companies, such as Podesta Divers and Underwater Resources in Pier 26, and cargo salvage and distribution companies, such as HSF Enterprises on Pier 46B. Located on Pier 62 and Seawall Lots 337 and 349, H and H Ship Services provides clean-up, processing, and disposal of marine waste oils. Other miscellaneous marine contractors include Golden State Marine in Pier 26, Nicholson's Precision Heat Treating in Seawall Lot 349, Pan Marine Contractors in Pier 33, and Willard Marine Decking in Pier 62.

B. Condition of Existing Facilities

As shown on the Chart on page 10, a number of the Support Services rent space on Seawall lots (e.g. SWL 302, 303, 337,and 349), and thus the condition of the substructure of the facility is not an issue. There are also a number of Support Service uses accommodated on the Port's finger piers. The chart on the next page identifies the piers being used for various support service activities, and an assessment of the condition of those piers.

SUPPORT SERVICE USES ON FINGER PIERS

PIER	ACTIVITY	CONDITION
3	Tug Boat	Fair to Poor
9	Bar Pilots, Tow, Salvage	Poor
15 17	Cotton, Cargo	Fair to Poor
19 23	Foreign Trade Zone	Good to Fair
33	Marine Contractors	Good to Fair
26	Marine Contractors	Poor
40	Tug and Tow	Fair to Poor
46B	Tug and Tow Cargo Salvage	Poor
50	Cargo Warehouse	Fair to Poor
80	Stevedores, Equipment Storage and Repair	Good
92	Equipment Repair	Poor

Unlike the situation at the container terminals where the Port, as the operator, assumes the cost of facility maintenance and repair, the Port's Support Service tenants typically assume responsibility for the upkeep of their facilities. This responsibility does not extend to the substructure of the finger piers, however, and in certain cases if a tenant makes substantial improvements to the value of the Port's facilities (e.g. installs a new roof), the Port will grant rent credits in exchange for the improvements.

C. Implications for the Port of San Francisco

The facilities used by many Support Service businesses involve relatively minimal improvements, sometimes little more than a berth to tie up to with a small storage area. On the other hand, uses such as the cargo sourcing or warehouse operations, require large sheds with varying levels of interior improvements. The level of capital improvements required to sustain any of the Support Service operations is relatively low, however, the revenue from these uses are also low compared to what the Port obtains from some of the prime industries.

The Port should pay attention to the special requirements of some of the Support Service uses, especialy the water-dependent uses, and those that require other types of specialized facilities. As the Port confronts increasing demand for space in the future it will be important to reserve appropriate facilities to ensure that critical Support Services can be accommodated as required.

VI. CONCLUSION

The Support Service businesses not only perform critical functions for the prime industries, they are important economic enterprises in their own right. At present, the Port is able to accommodate both the land use needs of the Support Services and the prime industries, given the current levels of activity and the availability of non-Port property devoted to these uses. However, as the prime industries grow, and industrial zoned land in the City declines, the Port will face increasingly difficult choices in allocating its land. At that point, the Port must establish clear priorities to ensure adequate facilities for the Support Service uses that must be accommodated on the water or in close proximity to prime industries.

The Port should take an active role in reviewing City action on proposed amendments to existing industrial-zoned land, and encourage the City to establish policies to protect the supply of such land in the City. The planning effort underway for the re-use of the Hunters Point Naval Shipyard presents an opportunity for the Port to demonstrate the long term needs of the prime industries and the Support Services, to ensure that the planning process gives due consideration to those uses. Similarly, the Port must work with BCDC to identify long term uses for the waterfront property that will comport with BCDC regulations.

Financial issues will be critical determinants of land allocations over the long term. The ability to sustain viable Support Service businesses is important to the Port's efforts at marketing its facilities to prime industries and their customers. For this reason, the Port must identify a financial decision-making framework that takes account of the secondary financial benefits associated with the Support Services. The City, too, should consider the economic impacts associated with the failure to provide an adequate supply of industrially zoned land to meet the future needs of the water-dependent industries and related support services. As shown in the Mission Bay study discussed above, the jobs in these industries tend to be high paying, possibly union, jobs, that are available to San Francisco residents.

With respect to the facility requirements of the Support Service businesses, the needs range from small sites with minimal improvements to large warehouses with rail or water access. None of these businesses, however, will require the level of capital investment for infrastructure necessary for some of the prime industries. Even so, in the long run the Port will have to determine how to address the problem of accomplishing substantial repairs to finger piers used by these operations, given that most of the Support Service businesses can not support high maintenance costs. It is possible that eventually those piers could be converted to uses that could support the cost of the repairs, and generate revenue to underwrite the capital investment required for growth of the water-dependent industries and their support services.

It has been suggested that when a pier can no longer sustain activity without major repairs, it should be demolished. While there are aesthetic benefits to this approach, the financial implications should also be noted. For example, the cost to demolish Pier 24, currently condemned, was estimated at $4 million, while the cost of restoring it to a viable economic use was $6 million. Given the financial requirements associated with sustaining and growing maritime commerce and industry at the Port, the demolition of potentially productive facilities, at high cost, may not be realistic as a general solution.

VII. DISCUSSION ISSUES

There are a number of issues that the Advisory Board should consider in the decision-making process with respect to land allocations for the Support Service businesses.

1. Are there other factors that should be considered, aside from growth in the prime industries, and declining availability of industrially zoned land, in assessing the potential long term demand for land and facilities to accommodate Support Services?

2. Are there industry trends toward consolidation of businesses, or increasing efficiencies that would reduce the land use requirements of the Support Services?

3. Which of the Support Services are dependent on waterfront locations at the Port of San Francisco, and which could be accommodated at other waterfront locations around the Bay?

4. Which Support Service businesses have special operational requirements such that proximity to prime industries or location on Port property is critical? Which of those industries are important to sustaining the viability of the prime industries? Might those relationships change over time?

5. What steps should the Port take with respect to City action on proposed amendments to plans and ordinances with respect to industrially zoned land?

6. Should the Port take an active role in attempting to ensure that maritime industrial uses are provided for in the long term land use plan for the re-use of the Hunters Point Naval Shipyard?

7. How can the Waterfront land use plan incorporate flexibility to allow the Port to adjust the location of Support Service tenants over time to accommodate changing needs of the prime industries and the Support Services?

8. What factors should the Port take into account in establishing a decision-making framework for allocating land in the future as competition for Port property increases?

9. How might the Port use facilities that are no longer viable for Support Service use?

PROPOSED QUESTIONS FOR SUPPORT SERVICE REPRESENTATIVES

1. How will growth in industries, such as the Excursion, Ferry Passenger Service and Cruise Ship Industry affect the growth prospects for the businesses which you represent? If the support service businesses that you represent were reduced in number , how would that affect the Excursion Boats, Ferry Boats, or Cruise Ship industries, or the Historic Ships or Small Boat community?

2. Do you foresee your business being relocated as a result of changes in land use at your location, or in the vicinity of your operations? If so, what options do you believe are available to you or others in your line of business?

3. Is a location on the water, or in close proximity to the water-dependent industries that you serve, critical to your type of business? Are there other special requirements that your business has that the Port should be aware of in making decisions about land allocations in the future?

4. Are there industry trends toward consolidation of businesses or increasing efficiencies that would reduce the land use requirements of the business that you represent?

5. Are there opportunities for public access that could be provided at the site of those businesses that occupy waterfront locations? What would be necessary to accomplish that objective?

	Container	Break-Bulk Neo-Bulk	Dry Bulk Liquid Bulk	Fishing	Ship Repair		Cruise	Excursion	Ferry	Marinas Small Boat	Historic Ships
Ship/Marine Chandlers	X	X	X	X	X		X	X	X	X	
Equipment Storage &	X	X	X	X	X		X	X	X	X	X
Warehousing, Consolidation and Distribution	X	X	X	X				X			X
Foreign Trade Zone	X	X					X				
Dredging	X	X	X	X	X		X				X
Moorage				X				X	X	X	X
Tug and Tow Operations	X	X	X		X		X				
Bar Pilots	X	X	X				X				
Ship Repair Launch & Boat Repair Services	X	X	X	X			X	X	X	X	X
Employee Customer Parking	X	X	X	X	X		X	X	X	X	X
Transportation Service	X	X	X	X			X	X			

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PORT OF SAN FRANCISCO
SAN FRANCISCO PORT COMMISSION
WATERFRONT PLAN ADVISORY BOARD

STATEMENT OF FACTS AND ISSUES AS TO THE LAND USE REQUIREMENTS OF THE FISHING INDUSTRY

(Revised 8/28/92)

The following material provides a brief statement of the facts and issues relating to the land use requirements of the Fishing Industry, and related support services, as identified in the profile report and in workshops with industry representatives.

I. FACTS AND ISSUES RELATED TO THE ADEQUACY OF CURRENT LAND AND FACILITIES TO MEET FUTURE INDUSTRY NEEDS

- Growth potential in the fishing industry varies depending on the particular activity. Fish handling and distribution activities have the greatest growth potential. As a result of earth quake damage, the Port has secured funding and begun improvements to the existing fish handling and distribution space at Sheds B and D on Pier 45 in Fisherman's Wharf. If additional space is required to accommodate growth, Shed C has been identified as the preferred location (although the necessary improvements to accommodate expansion into Shed C have not been funded at this time). Pending the completion of the earthquake repairs at Pier 45, however, Piers 28, 33 and 54 are being used for fishing activities. Industry representatives expressed doubts as to whether those facilities could be upgraded to meet anticipated regulations for fish handling. The Port intends to relocate these activities back to Pier 45 which will be upgraded to meet new standards. In the meantime, some fish handling and distribution operations have relocated away from the Wharf, although the Wharf is still their preferred location due to its concentration of activity.

- Growth potential of commercial fishing was also considered in the existing plan for new harbor, berthing and support facilities (parking, restrooms, storage, etc.) at Hyde Street Pier and intensification of uses on Pier 45 collectively referred to as the "Seafood Center Project". Industry representatives indicated that the planned improvements would meet future needs. (They also noted that the improvements, while desirable, could not be funded by the fishing fleet through increased rents and fees.) Herring activity, which has seasonal demands that exceed the planned capacity at Fisherman's Wharf, can be accommodated at Pier 54, with overflow uses at Piers 28 and 33.

- The sportfishing industry representatives stated that growth in their businesses was constrained directly by state regulation of the salmon catch, and indirectly by deficiencies in their facilities at Fisherman's Wharf, such as the lack of accessible floating docks and inexpensive parking for their customers.

- The location, availability and cost of parking is a concern of the commercial fishing industry as well as sportfishermen. Even though the number of spaces proposed to be provided in Shed A as part of the Pier 45 improvements would meet Cal Boating requirements, the cost of those spaces is an issue to the fishing industry. Furthermore, there is concern that the amount of parking would not be sufficient to accommodate industry needs, particularly if there is additional tourist-related development in the area. In addition, the commercial

fisherman want parking to be retained near Scoma's Restaurant because proximity to their boats is important for off-loading gear and boat repairs. The Seafood Center Project plans includes short term parking spaces adjacent to new berths to meet these needs in the future.

- Representatives indicated that in addition to parking, other fishing industry support service uses, such as chandleries and gear storage, must be located in close proximity to the harbor.

- Given the high level of fish distribution and deliveries, particularly in the early morning hours, there is a need to provide truck access through the Fisherman's Wharf area. Industry representatives suggested that the fish distribution activities currently taking place from trucks parked on Jefferson Street should be relocated onto Port property, possibly at Pier 45 if a truck turn-around could be provided, where they can be regulated according to sanitation standards, and in order to reduce street congestion.

- Additional space may also be required to accommodate a Fisheries and Environmental Research Institute, which is being studied for possible development at Shed C on Pier 45.

- Re-location of the fishing industry out of the Wharf area was not considered to be feasible because of the need for proximity to the fishing grounds and a protected harbor. Although some of the needs of the fishing industry could be accommodated elsewhere on Port property, or with respect to fish distributing, off-Port property, the industry representatives of commercial fishing, sports fishing, fish handling and related support services emphasized the importance of proximity to the waterfront, and to each other. The principal exception was that the herring fisheries, which is a seasonal activity, could be accommodated away from the Wharf at Piers 54, 33 and 28.

II. IMPLICATIONS OF REGULATORY AND ENVIRONMENTAL ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The regulatory and environmental issues with the greatest potential impact on the fishing industry's need for additional land are (1) reforms of the Central Valley Water Project, and related federal and state water distribution and water quality policies, to ensure an adequate supply of clean, fresh water to the Bay to sustain the salmon fishery and other fisheries resources, and (2) pending federal regulations of fish handling. BCDC plans and policies which restrict parking and require public access within the shoreline band may be an issue in terms of addressing the needs of the industry. An additional environmental issue is the possible adverse impacts on water quality caused by fishing-related activities that do not meet adopted water quality standards.

III. IMPLICATIONS OF FINANCIAL AND ECONOMIC ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The fishing industry can not support the full cost of the Pier 45 Earthquake Repair Project or the Seafood Center Project (including the new harbor and further Pier 45 improvements, such as the build out of space in Shed C). Industry representatives maintain that the presence of the industry in Fisherman's Wharf provides value to the restaurants and tourist businesses, and that Port revenue from those uses should be used to subsidize the industry. In addition, the industry provides important economic benefits, such as jobs and lower cost

of product for local consumption. Grant funding and low cost loans have been and may continue to be available to reduce the cost of capital improvements for this industry.

- The cost of capital improvements for the fishing industry will vary depending upon the final plans for improvements to the harbor and Pier 45. The cost of completing the earthquake repairs to Pier 45 (which diverted funding originally slated for the Seafood Center) is estimated at $ 13.4 million (funded by Federal and State grants, FEMA and $5.8 million from the Port). The proposed Seafood Center Project, which included approximately $6.6 million in improvements to the harbor, was estimated in 1989 to cost $26 million. Funding for that project has not been completely secured and it is currently being revised in light of the earthquake repairs, increasing construction costs and industry requirements. However, the Port has allocated $300,000 to begin the environmental review process for the Seafood Center Project .

FISHING INDUSTRY PROFILE

I. INTRODUCTION

For the purposes of this study, the fishing industry is divided into three distinct sub-sectors: 1) commercial fishing vessels; 2) charter "sportfishing" vessels; and 3) fish handling. "Fish handling" generally refers to wholesale buying and selling of fish, fish filleting, sectioning, sorting and distributing for local and regional consumption. Extensive "fish processing", generally defined as high volume filleting, canning and freezing to serve distant markets, is a relatively minor activity on the San Francisco waterfront. At the Port of Francisco, the fishing industry primarily is located at Fisherman's Wharf, although "overflow" activities are located at other piers. The Port's intent is to return as many of these fishing industry activities as possible back to Pier 45 once the Pier 45 Earthquake Repair Project is completed.

This profile of the fishing industry at the Port of San Francisco includes the following components:

- o General market trends for the fishing industry are presented, including a discussion of the factors that may affect those trends, and the implications for the Port of San Francisco.

- o Regulatory issues and environmental implications associated with future fishing industry operations are identified, such as the land use and zoning requirements of the City's Northeastern Waterfront Plan and opportunities for improving public access. Environmental and resource management issues also will be addressed.

- o Financial and economic issues are discussed to the extent they are pertinent to Port of San Francisco decision making.

- o Existing fishing industry facilities are described, and the suitability and sufficiency of those facilities to support current usage and future requirements also is discussed.

- o The issues associated with the fishing industry that must be addressed as part of the land use planning effort will be summarized. In addition, a list of questions that the Advisory Board members may want to pose to industry representatives is attached.

The presence of a healthy fishing industry at the Port of San Francisco is recognized as an essential ingredient in maintenance of the prosperity and colorful ambience of the Northern Waterfront. The Port of San Francisco, with the active support of the fishing industry and the Fisherman's Wharf community, has

developed plans for the "Fisherman's Wharf Seafood Center Project", designed to ensure that physical infrastructure needs of the fishing industry (including new berthing and support facilities for fishermen and improved fish handling facilities) are met, while the unique character of Fisherman's Wharf is maintained. The Seafood Center Project plans (attached as Exhibit A) are the culmination of years of research, planning and development during which many background reports, studies and proposals were prepared. This Profile does not attempt to summarize all aspects of all these documents. Rather, it is a compilation of those issues that Port Staff believe are most important for the Waterfront Plan Advisory Board to consider as they develop land use recommendations for the San Francisco Waterfront. For those who would like more information, relevant documents are available upon request.

II. GENERAL MARKET TRENDS AND FORECASTS FOR THE FISHING INDUSTRY

A. Background and Recent History of the Fishing Industry

Within the past decade, seafood has become one of the fastest growing sectors of the U.S. food market. Since 1982, seafood consumption in the United States has increased 25%, in large part due to the public's increasing awareness of the dietary, health and budgetary benefits of seafood consumption. In 1990, over 3.8 billion pounds of seafood was consumed in the United States. Landings at U.S. ports totalled 7.3 billion pounds, with an estimated landed value of $3.4 billion. The U.S imported another 2.9 billion pounds (valued at $5.2 billion) and exported 1.9 billion pounds (valued at $2.8 billion).

Over 100 species of fish are caught and landed by commercial fishermen at the Port of San Francisco. Roe herring, salmon, crab, rock fish, tuna and albacore are the leading categories. Most fishermen commit all of their catch over a designated period of time to specific fish handlers located on the waterfront. Many fish handlers have a presence in a number of ports, thus a fisherman dedicated to one handler may make deliveries over a large geographical area. In exchange for delivering fish, the handler may provide any of a host of services to the fishermen, including financing of vessels, equipment, repairs, fuel, ice and berthing.

For the most part, fish handlers operate competitively and independently. Most local fish handlers market more product through their waterfront facilities than they land by utilizing a network of buying stations along the coast. Fish auctions for marketing product are rare on the West Coast.

B. Growth Forecasts for the Fishing Industry

In the mid-1980's the Port of San Francisco commissioned a study, Fisherman's Wharf Infrastructure Planning (Carol Brown, July 1986) which, among other objectives, projected trends in the commercial fishing industry, quantified fisheries resources that

o In San Francisco roe herring represents over one half of the landed weight and about one quarter of the landed value. The roe is processed exclusively for the Japanese market, where it primarily is eaten as a luxury food during New Year festivities. Because of the limited market and a variety of competing sources (such as Washington, Oregon, Canada, the former USSR, Peoples Republic of China and North and South Korea,) the fishery is somewhat vulnerable to market competition.

o Although most of the popular, locally harvested bottom fish species sold in the fresh fish market are already harvested close to their maximum sustainable yield, improved vessel and fish handling facilities could result in the Port attracting a larger share of local landings.

3. Trends in Fish Handling

o San Francisco is the home of one of the largest concentrations of seafood wholesalers, distributors and specialty fish brokers on the West Coast. Many of these companies operate multiple facilities in the region.

o Fish "handled" at the wharf includes fish landed at the dock, brought to the wharf by air and truck, or that changes hands between fish brokers and distributors in some other way, for instance arriving in large shipments which are broken down into smaller packages. A fish is landed once but can be handled more than once and can be handled at Fisherman's Wharf without having been landed there. The volumes of fish handled are not monitored, but are estimated to have been at least twice the amount landed and reported in recent years. Fish handling is predicted to be a major area of growth if fishing industry infrastructure is improved.

o The trend in the industry is to locate high volume processing facilities away from the waterfront, where large retail and restaurant-chain consumers have ready access to large processing plants. At the opposite end of the spectrum, local, easily accessible distributors are needed to serve independent retailers and restaurants such as those that characterize the Wharf.

4. Trends in Charter "Sportfishing" Industry

o During the first half of the 1980's, the Northern California fleet of charter vessels taking sportfishermen on day trips remained relatively constant. In the San Francisco area there were approximately 55 charter boats operating regularly, 25 of which operated out of San Francisco. In addition to fishing for salmon, striped bass, sturgeon or bottomfish, the boats often conduct whale watching tours and other trips in order to remain active throughout the year. (Brown, 1986).

o In 1990, 78 charter boats operated out of San Francisco Bay and Delta harbors, carrying a total of 86,170 passengers. This

could be captured by the commercial fishing industry based at Fisherman's Wharf and assessed the physical infrastructure needs of the fishing industry at Fisherman's Wharf. The following trends and forecasts identified in this study have been used by the Port to set priorities for fishing industry improvements included in the Seafood Center Project:

1. Trends in Fish Resources

o Despite steady growth in past years, only limited fisheries growth is foreseen for the next decade. Federal and State regulations and quotas (discussed in Section III, below) limit harvest of the most valuable species such as herring and salmon. It is unlikely there will be a significant overall increase in traditional fisheries in the near future, given the depleted condition of many of these resources.

o The highly regulated salmon fishery generally occurs from May to December. This fishery has declined significantly due to overfishing, environmental conditions and loss of freshwater access for both adult fish returning to spawn and juvenile fish. Diversion of water for agricultural and domestic purposes has severely limited the populations of salmon that can be locally supported.

o The crab fishery occurs from November through June. Although historically abundance has been cyclical, overall, harvestable crab has declined throughout the West Coast, probably due to environmental degradation and overfishing.

o While many of the traditionally important fisheries such as crab and salmon have sharply declined, this decline has been partially offset by increased landings of new commercial fish stocks, such as herring and bottom fish (sole, rockfish, sablefish, halibut, etc.).

o The herring season which generally runs from December through February has shown considerable stability in the last decade.

2. Trends in Fish Landings

While total California fish landings declined in the 1980's, landings in the San Francisco area showed a gradual increase. An estimated 40 million pounds of fish with a value in excess of $20 million is landed annually in the Bay Area, about half of which is landed at the Port of San Francisco.

o San Francisco is recognized as a major West Coast port for landing, handling and distributing fresh seafood. Reported landings have more than tripled over the past 25 years, largely because of capture of an increasing variety of species.

o In San Francisco roe herring represents over one half of the landed weight and about one quarter of the landed value. The roe is processed exclusively for the Japanese market, where it primarily is eaten as a luxury food during New Year festivities. Because of the limited market and a variety of competing sources (such as Washington, Oregon, Canada, the former USSR, Peoples Republic of China and North and South Korea,) the fishery is somewhat vulnerable to market competition.

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o In 1990, 78 charter boats operated out of San Francisco Bay and Delta harbors, carrying a total of 86,170 passengers. This

number represents a 7% decrease from the number of boats operating in 1988. However, during the same time period the number of anglers on these vessels increased by approximately 2%. (Source: California Department of Fish and Game).

o A recent report compiled by the Fishermen for a Better Wharf, a group representing the charter "sportfishing" industry, states that the current charter fleet at the Wharf consists of 15 boats which carry between 25,000 and 45,000 customers/year. Port records indicate that there are 20 charter boats.

o According to the Fishermen for a Better Wharf, in recent years the loss of previously unregulated parking spaces to metered spaces, tour bus parking, taxi loading and limited-time parking zones, bus stops and larger than normal red zones, combined with outdated berthing and support facilities have led charter and commercial fishing businesses to relocate to other ports with more up to date facilities.

o The Port was unable to locate any reports forecasting trends for this segment of the fishing industry.

C. Implications for San Francisco

The potential increase in the amount of fishing industry activity that would be expected in future years, particularly with fishing industry improvements planned for the Wharf area is not precisely quantifiable. Significant factors, independent of the number of berths and amount of space devoted to fish handling, which influence the amounts of fish landed and handled include the success of the catch of the various species, limits on the number of licenses issued and harvest quotas set by federal and state agencies, demand for various types of seafood, development of markets for new species, and other marketing efforts. A species by species analysis of growth potential commissioned by the Port estimated that the amount of fish landed at Fisherman's Wharf with fishing industry improvements currently planned as part of the Seafood Center Project could increase by about 20%, primarily from small but steady growth in bottom fish harvests and cyclical increases in crab and salmon harvests. The amount of fish handled could increase by about 10 to 20 %. A significant volume of product landed in other ports will continue to be handled through facilities at Fisherman's Wharf. The amount of imported product will be determined largely by the cost effectiveness of using the Wharf as a distribution center, given transportation and operating costs. (Brown, 1987).

Improvements planned as part of the Seafood Center Project at Fisherman's Wharf should result in an increase in the number of active vessels homeporting there, but not necessarily an increase in the total number of vessels.

The fleet of active vessels homeporting in San Francisco probably will not exceed 80 commercial vessels and 20 charter vessels. The large transient fleet will be more significant during the first few years of the proposed new berthing facilities. Gradually, however, the transient fleet will convert to permanent assigned berths. It is expected that the existing fleet of approximately 80 small boats that fish occasionally or are of historical significance will remain at the Wharf. The herring fleet, which primarily consists of transient vessels, will continue to have a relatively brief, but intense presence.

Given operating overheads and space limitations, the San Francisco waterfront is unlikely to become a major fish processing center with high volume filleting and freezing operations serving distant markets. It does, however, have the potential to expand handling of fresh product for local consumption, including filleting, sectioning, sorting and distributing. Improvements associated with the Seafood Center Project are intended to accommodate this trend.

Factors independent of the Seafood Center Project improvements that have and will continue to contribute to San Francisco's prominence in the fishing industry, include:

o the Wharf's reputation for offloading high quality, high value fresh fish.

o San Francisco's proximity to fisheries resources.

o San Francisco's central location on the Coast which makes it attractive to transient fishermen from all over the West Coast.

o The ease with which a fishing boat can enter and leave the harbor safely.

o The Wharf's attractiveness to a large number of fish buyers because it is conveniently located near diverse and productive fishing grounds, major markets, restaurants and transport systems.

III. REGULATORY AND ENVIRONMENTAL ISSUES

A. History of Planning for the Fishing Industry

During the 1950's, fishing industry facilities at Fisherman's Wharf began to fall into a general state of disrepair and became increasingly threatened by encroachment of restaurants, hotels and tourist shops. In response, planning efforts since the 1960's have focused on protection of the fishing industry, calling for a breakwater, berthing and vessel support facilities, and expansion of fish handling to maintain the Wharf's prominence in the fishing industry. Securing these improvements became one of the first priorities of the Port in 1969, when its lands and operations were transferred to the City and County of San Francisco.

Early planning efforts failed to achieve a viable consensus among the diverse Fisherman's Wharf interest groups regarding how to finance and where to locate fishing industry improvements. In 1974, a citizen's committee began developing a plan for repair and expansion of fishing industry uses. In order to generate revenue to enable the Port to finance these facilities, a mixed-use development that included housing was proposed on Pier 45. These plans were incorporated into relevant planning documents of the City Planning Commission and BCDC. Despite these efforts, little physical progress was made towards Wharf improvements in the 1970's.

In 1980, The Fisherman's Wharf Action Plan was adopted by the Port Commission and, in 1981, was incorporated into the City's Master Plan. This Plan recommended the construction of a new "Hyde Street Pier/Breakwater of up to 3 1/2 acres in size with offloading and fish handling facilities, fuel dock, ice house, net loft, cold storage and other fishing uses... for the relocation of fishing uses ... on Pier 45." The Plan also called for development of Pier 45 as a mixed-use, predominantly residential complex.

In 1981, the U.S. Army Corps of Engineers began design and feasibility studies for construction of a breakwater, independent of the Hyde Street Pier. Congress authorized the breakwater's construction in the 1985-86 federal budget and its construction was completed in October, 1986. At about this time, the Jefferson Street Seawall was repaired and utilities were installed or repaired for individual fishing boat berths.

Once the breakwater was planned and funded, the Port was able to proceed with planning for related fishing industry improvements. In 1984, the State Lands Commission notified the Port that the housing proposed for Pier 45 would not be consistent with the public trust. In 1985, after joint study with a local citizens and business advisory group, the Port amended the Action Plan, replacing the proposed housing on Pier 45 with a proposed hotel as the primary source of funding for the fishing industry improvements.

In 1986, the Port: (1) appointed a project advisory committee including representatives of the fishing industry, local merchants and residents; (2) retained a consultant (Carol Brown) to prepare a report assessing fishery resources that could be captured by the Wharf industry and defining the industry's infrastructure needs; (3) initiated conceptual design of fishing industry facilities; and (4) solicited developer proposals for the Pier 45 hotel/commercial development. Once developer proposals were received, it became apparent that an expanded Hyde Street Pier could not physically accommodate industry facilities that would have been relocated from Pier 45 and that commercial development proposals would not produce enough revenue to finance the Hyde Street Pier.

The Port again redirected its planning efforts, this time considering alternatives that would combine industry facilities with commercial development of Pier 45, as well as use of Pier 45 solely by the fishing industry. At the conclusion of this effort in 1987, the Port formally rejected commercial development proposals and instead adopted plans for the current Fisherman's Wharf Seafood Center Project. Planning for the Seafood Center Project has been a Port priority since 1987. Although the phasing, funding and implementation of these plans has been affected by the 1989 Earthquake, work has begun on the Pier 45 Earthquake Repair Project, which includes certain code-required improvements anticipated in the Seafood Center Project plans.

B. The City's Master Plan Policies for the Fishing Industry

The Northeastern Waterfront Plan, an element of the San Francisco Master Plan, addresses land use in the Fisherman's Wharf area. Objective II of this Plan is to "maintain and enhance the maritime character of Fisherman's Wharf area and enhance the area as a center for the commercial fishing industry." Relevant policies include Policy 1 - to "encourage the retention and expansion of the commercial fishing and fish handling industry and businesses which provide services to the fishing fleet through construction of a new breakwater in the general area of the Hyde Street Pier; Policy 2 - to "[p]ermit only those Bay-oriented commercial recreation and assembly facilities on the Hyde Street Pier and along Fish Alley which are incidental to their primary commercial fishing industrial use" and to "[p]ermit commercial office (not related to the fishing industry), hotel and residential, convenience retail, institutional and accessory parking uses on pier 45."; and Policy 3 - "to encourage preservation and restoration of the maritime character of Fish Alley."

The Commerce and Industry Element of the City's Master Plan also refers specifically to the Fisherman's Wharf area in Objective 5, Policy 7 - "....commercial fishing, fish processing and businesses which provide services to the fishing fleet should be encouraged and expanded, particularly in the area of the Hyde Street Pier and Pier 45".

For the past several years, the Fisherman's Wharf Citizens Advisory Committee has been working with various City agencies to achieve consensus for proposed amendments to the City's Master Plan policies, to better reflect current needs and goals of the Wharf community.

The current Draft Plan (November 22, 1991) includes the following language relating to the fishing industry and, in particular, the Seafood Center Project. The Draft Plan also omits any reference to commercial, residential, or hotel use at Pier 45.

Draft Land Use Objective 1, Policy 1

Restore and expand the role of the Wharf area as an active, working commercial fishing port.

The reason Fisherman's Wharf became a tourist attraction in the first place - and the genesis of its name - has been neglected. The moorage facilities to serve the commercial fishing fleet are inadequate, obsolete, or in some cases non-existent. Facilities for fish processing are inefficient and insufficient. As a consequence, much of the commercial fishing industry has relocated to other ports.

Planning and environmental studies should be completed for new and expanded berthing facilities for commercial fishing vessels, including new support facilities such as offices for harbor staff, restrooms, showers, laundrymen, fuel dock, convenience store, maintenance shop, refuse containers, and accessory parking.

The maritime uses and the maritime industrial character of Fish Alley should be preserved and upgraded as part of the working wharf. Additional uses other than short-term, non-permanent uses such as festivals, which are not maritime industrial in character, should not be permitted north of Jefferson Street.

The existing sheds on Pier 45 should be renovated to provide high quality spaces for modern fish off-loading, handling and distribution facilities with their accessory uses including parking. The feasibility of locating a fisheries institute, including fish industry and support functions as well as educational and conference facilities on Pier 45 should be explored. A retail fish market in the truck loading area on Pier 45, at times consistent with the safe and efficient functioning of the fish processing activities, should also be considered.

C. Opportunities for Public Access

Providing public access is an objective of both BCDC and the Port of San Francisco. Many citizens have expressed interest in enhancing public access in or near fishing facilities to allow the public to experience a "working waterfront." This objective should be achievable in many locations at Fisherman's Wharf, provided that the public is discouraged from entering areas where fish offloading and trucking operations occur. Very preliminary access plans have been developed and will be refined as the Port proceeds with environmental review for the Seafood Center Project. Revenue streams from fishing industry uses are not expected to be sufficient to support the costs of public access improvements. Other funding sources must be explored.

D. Environmental Issues

Shortly after the 1989 Loma Prieta Earthquake, the City's Office of Environmental Review (OER) completed a Preliminary Negative Declaration for the Seafood Center Project. The conclusion of the Preliminary Negative Declaration was that there was no substantial evidence that the Seafood Center Project could have a significant effect on the environment.

Fishing industry operations at Fisherman's Wharf are located immediately adjacent and to the east of the South End Rowing Club and the Dolphin Club, whose members regularly swim in Aquatic Park. Because of these recreational uses and swim club members' concerns about water quality, existing conditions and potential impacts of the fishing industry operations on Aquatic Park were specifically studied during preparation of the Preliminary Negative Declaration. It was determined by OER and independent technical experts that the Seafood Center Project would increase activities that currently contribute to unacceptable, high levels of bacteria in the area, but also would include infrastructure improvements that would substantially reduce the amount of polluting material entering the water from any given increase in those activities. The conclusion of the study was that:

> "... the magnitude of improvement of bacterial levels that would be expected with the project would be substantially larger than the magnitude of deterioration that would be expected to result from the increase in activity, and that the net effect of the project would be an improvement in water quality problems resulting from high bacteria levels. There is no evidence that fishing-related activity has resulted in substantial chemical contamination in the past, and no reason to believe that significant contamination would occur in the future."

In 1989, the South End Rowing Club, Concerned Citizens and Users of Aquatic Park and the Dolphin Club filed appeals with the City Planning Commission challenging the adequacy of the Preliminary Negative Declaration. After meetings with the Port, the South End Rowing Club agreed to retract their appeal. The Port entered into settlement negotiations with the other two organizations, in the hope their appeals also would be withdrawn. Negotiations continued for a time, but were eventually determined by the Port to have reached impasse and were halted. After the Loma Prieta Earthquake, the Port decided that earthquake repairs to Pier 45 were its first priority. The Port decided to proceed with earthquake repairs permitted under the California Environmental Quality Act (CEQA) exemption for emergency repairs and conduct further environmental review for the Seafood Center Project.

E. Dredging

Dredging probably will be necessary for the existing harbor facilities and will be necessary for both construction and ongoing

maintenance of the proposed Hyde Street Harbor, which is a major component of the Seafood Center Project. During construction, the areas under and around the proposed Hyde Street Harbor berths would be dredged to a minimum of -20 feet MLLW, resulting in removal of about 20,000 cubic yards of material. Preliminary estimates are that maintenance dredging for the Hyde Street Harbor would be approximately 20,000 cubic yards every 5 years. A significant increase in dredging costs, which is expected at this time, could affect financial viability of the Harbor.

It is important to note that one major reason that dredging limitations have been established relate to protection of endangered fisheries. Thus the dredging issue is one that cuts both ways for the fishing industry: berthing facilities are of key importance to the industry and require dredging, yet a major reason given for strict limitations on dredging has to do with the possible negative impacts on fisheries resources.

F. State and Federal Regulation of Fisheries Resources

The California Department of Fish and Game has primary responsibility for regulating the fisheries resource in California. Fish and Game also conducts studies to determine the amount, size and age of different fish species; establishes the seasons for harvesting fisheries vulnerable to overfishing; polices collection of fish as they are unloaded in ports; breeds, raises and releases fish to enhance natural population; comments on proposed projects that may affect spawning and juvenile fish habitat; conducts habitat enhancement projects; licenses commercial fishermen and boats; limits the number of boats fishing for species vulnerable to overharvesting; and denies or restricts the amount or timing of commercial harvesting of certain fisheries. Other agencies charged with protecting and/or regulating fisheries resources include the Pacific Fishery Management Council (PFMC) and the National Marine Fisheries Service (NMPHS) of the U.S. Department of Commerce.

According to a 1984 study by the California State Coastal Conservancy, fishermen do not believe that the management regulations imposed on them are the best way to protect the fisheries resources. They feel that alternative management plans should be developed that would provide more flexibility in adjusting for conditions and minimize the problems of discards and fish waste. In any event, by regulating harvests of many fisheries, these state and federal agencies affect the amount of fish landed and handled at the Port of San Francisco.

G. Seafood Safety and Inspection

The Food and Drug Administration (FDA) of the U.S. Department of Health and Human Services is the primary agency responsible for the regulation and safety of seafood. The FDA conducts sanitary

inspections of seafood processing operations and evaluates fish handling procedures. Inspectors analyze and test seafood products in fish handling facilities for filth, decomposition and contaminants. In California, the State Department of Health Services supervises and inspects facilities where fish are cleaned, filleted, iced and packed for distribution.

Seafood product safety and sanitation is an issue that has received considerable media and public attention in the last few years. The fishing industry is being encouraged by state and federal agencies to participate in voluntary inspection and grading programs to identify and guard against contamination hazards associated with "critical control points" during seafood handling operations. In 1990, both the U.S House of Representatives and the U.S. Senate passed bills that would have instituted a comprehensive mandatory seafood inspection program designed to expand the existing federal and state regulatory activities. Disagreements between the two bills remain unresolved. In the meantime, in 1990 and 1991, $25 million was granted to the FDA to create an "Office of Seafood". Since the Office of Seafood opened in 1991, the FDA already has completed on-site evaluations of over 3,500 of the 4,100 seafood processing facilities in the United States. It is expected that the costs of complying with any new seafood safety and sanitation requirements will place considerable financial burden on fish handlers, particularly in those facilities that do not have adequate utility systems and infrastructure that can be adapted easily and economically.

H. Implications for San Francisco

The regulatory and environmental issues identified above have significant implications for the future of the fishing industry at the Port of San Francisco. Although there is strong support from regulatory agencies such as the City Planning Commission for fishing industry improvements planned by the Port, there is little financial support to implement regulatory objectives. Moreover, with respect to regulation of dredging, policies of certain regulatory agencies could result in a substantial cost increase for fishing industry improvements such as the Hyde Street Harbor.

With respect to environmental issues, based on the Preliminary Negative Declaration prepared for the Seafood Center Project prior to the earthquake, it is doubtful that the proposed fishing industry improvements would have a negative impact on the environment. Nevertheless, because the earthquake caused the Port to change the phasing and certain elements of the Seafood Center Project, the Port must submit a revised project description to OER for further environmental review.

Some of the greatest impacts on the economic health and viability of the fishing industry are outside the control of the Port of San Francisco and City regulatory agencies. For example,

the availability of fisheries resources will be most affected by environmental and market conditions, which are largely impacted by actions taken by federal and state agencies charged with responsibility for protecting fisheries. Furthermore, more stringent sanitation and safety regulations for fish handling will require the industry to bear significant infrastructure costs to adapt facilities to changing requirements. While the Port is attempting to help mitigate these latter impacts through code-required infrastructure and utility improvements associated with the Pier 45 Earthquake Repair Project, the Port is not in a position to bear all related costs, and has no immediate plans for similar infrastructure improvements in other fish handling areas, such as Fish Alley.

If these issues are required to be resolved by individual ports, relying on existing revenue bases, then tradeoffs between regulatory concerns and achieving economic stability in the fishing industry are inevitable. To the extent that the issues are identified and addressed in a broader regional or statewide context, then it is possible that the need for tradeoffs can be minimized.

Although the Port of San Francisco can lobby for increased regional, state and federal participation in funding port development, the Port has had to make land use and investment decisions based on existing circumstances. The question presented in this current planning effort is whether land use decisions should be made based on existing conditions or, alternatively, assuming changes in regulations and funding mechanisms.

IV. FINANCIAL AND ECONOMIC ISSUES

A. Financial Issues

The major financial issue confronting the Port with respect to the fishing industry is that of obtaining and allocating capital to maintain and expand existing fishing industry operations in the face of 1) slow industry growth, 2) rising maintenance and dredging costs, and 3) competition from harbors in non-urban, less tourist-oriented areas that face fewer land use constraints and therefore can more easily supply industry support services such as free parking and storage and staging space for fishing gear.

Prior to the 1989 Loma Prieta Earthquake, the Port was proceeding to develop the Hyde Street Harbor (new berthing and support facilities for the commercial fishing industry at the foot of Hyde Street) as the first phase of the approximately $26 million Seafood Center Project. The Harbor was estimated to cost approximately $6.6 million and was to be financed with a $3 million loan from the California Department of Boating and Waterways (Cal Boating), a $500,000 grant form the Coastal Conservancy and a $3.1 million contribution from the Port.

"Traditional and new funding sources for commercial fishing projects should be expanded. Additionally, consistent with applicable laws of the State of California, funding of harbors for projects which benefit or support the commercial fishing industry should be given higher priority than non-commercial fishing projects. The Army Corps of Engineers, the Economic Development Administration and the California Department of Boating and Waterways have long financed projects that benefit the commercial fishing industry. The problem is that not enough funds are available. Cutbacks in federal programs, restrictions on using existing state sources and harbor's limited ability to increase revenues make raising the large amounts of money necessary to complete their expensive projects difficult if not impossible. More funds must be made available."

The Study suggests further study of the following ideas:

o New funding sources should be found (examples include removal of the diesel fuel tax exemption for commercial fishermen and use of these revenues ($3 - $4 million a year) to develop and improve commercial fishing facilities.

o Transfer the funds derived from sales tax on diesel fuel sold to commercial fishermen - about $2.4 million a year - from the State's general fund to a special fund for commercial fishing projects.

o Allocate money from the State's tidelands revenues to new facilities that support commercial fishing.

o Form a regional cooperative marketing organization or commodity commission to help coordinate the catching, buying and marketing of fish, monitor demand and prices in different regions, coordinate transactions between buyers and regional markets and actively promote fish consumption and fish products nationwide and report to the industry on its position in the national market.

B. Economic Issues:

Obviously, direct revenue to the Port is not the only consideration in deciding the funding priority of fishing industry improvements at the Port of San Francisco. It is clear that fishing industry operations contribute significantly to the local economy, especially in terms of job creation, tourism, etc.

There is not a current, comprehensive analysis available of the economic impacts resulting from all fishing industry operations at the Port of San Francisco. There are, however, several studies that present relevant information, albeit from different perspectives. The conclusions of these studies relevant to the fishing industry are discussed below.

1. Port of San Francisco Economic Impact Report, prepared by Trade Information Planning Systems, September, 1988.

This study estimated the economic impact of all sectors of Port activity for the base year 1986, in terms of employment, payroll and revenues generated. The economic impacts associated with the San Francisco fishing industry were summarized within the sector entitled "Fisheries". The study was designed to quantify both "direct" impacts (defined as direct employment, payroll and revenues generated by firms associated with the Port) and "indirect" impacts, resulting from direct impacts (such as purchase of supplies, materials and services by firms engaged directly in Port of San Francisco fishing industry activities.) Also quantified were "induced" impacts, defined as those occurring when employees directly employed by a Port business spend their disposable income on food, transportation, shelter and other goods and services. The summation of direct, indirect and induced impacts were said to comprise the total impacts of the Port activity.

The following chart summarizes the conclusions of the study with respect to the fishing industry:

TOTAL DIRECT, INDIRECT & INDUCED IMPACTS

Category	Employment (FTEs)	Payroll ($1,000)	Revenues ($1,000)
Commercial/Historic Vessel	281	$4,582	$13,196
Charter Boats	103	$1,158	$2,603
Processors/Buyers	139	$6,170	$68,752
Port Staff/Allocation	15	$560	$2,151
Total	538	$12,472	$86,704

Notes: Fish processor/buyer revenues do not include the value of fish landed at the Port since this would represent double counting.

Source: Trade Information Planning Systems

The study assumed 67 active commercial fishing vessels and 22 historic fishing vessels moored at Fisherman's Wharf. The study also assumed 22 charter vessels, making an average of 174.5 trips per year, with 12.5 customers paying, on average, $35.00 each. Based on statistics from the California Department of Fish and Game, the study stated that annual landings of fish at the Port averaged more that 21 million pounds of fish, valued in excess of $8.5 million. The study also stated that San Francisco fishermen estimated that approximately 69% of all their purchases were made in San Francisco.

The study assumed 21 fish handlers, located in three distinct areas at the Port of San Francisco, Pier 45, Fish Alley and Pier 33. According to the study, total sales of fish crossing the Port's docks was estimated to be $45.1 million. Since most fish handling firms received fish from Monterey and other non-local areas, the indirect impact of fish processing was considered to be experienced outside of San Francisco.

2. Analysis of the Economic Impact of the Commercial Fishing Industry on the City and County of San Francisco, (Patrick J. Flanagan, Project Coordinator, August 1989).

The purpose of this study was to 1) determine and measure the total economic contribution of the Fisherman's Wharf commercial fishing industry to the City of San Francisco for the year 1987, and 2) develop a projection of what might have occurred if the Port of San Francisco had fully implemented their modernization plans (essentially the Seafood Center Project) by 1987, and what modernization would have meant in terms of the total increase of wealth and jobs to San Francisco.

The modernization scenario did not include a change in the total number of fish handlers at the Wharf because of land use constraints. The study included only product directly off-loaded at the Port, not product trucked down or flown in from another locality. The study assumed that the number of berths would increase by 88 berths, bringing the total of the San Francisco fleet to 173, thereby raising ocean harvest landings in the San Francisco area by 10%. Status quo landings for the year 1987 were assumed to be approximately 20.5 million pounds and, under the modernization scenario, to be 29.3 million pounds. The conclusions of the study include the following:

o Fish landings are the driving engine in the commercial fishing industry's economy.

o The study substantiates reports commissioned by the Port of San Francisco that estimate that "for every vessel, a total of eight to nine jobs (direct, indirect and induced) are created." For each vessel (85 in 1987), there was an average of 2 crew members and 2 shoreside fish handling workers, for a total of 4 direct jobs. It is reasonable to assume that when including the large number of indirect and induced employment sectors (fuel docks, ice supply, insurance, restaurants, barbers, etc.) 4 more jobs are also created by this industry. Based on this ratio, total employment contributed by the Fisherman's Wharf commercial fishing industry was approximately 680 jobs, or 8 jobs per vessel homeported in San Francisco.

o The "modernization" scenario will generate an increase of about 572 - 604 new jobs, bringing the total employment from commercial fishing up from approximately 680 jobs to between 1,192 to 1,303 jobs.

o Total actual household income of vessel and fish handler owners and employees in 1987 was approximately $13.5 million. Taking into account the various local sectors of the economy impacted by their disposable income, the fishing industry of Fisherman's Wharf generated a total community impact of some $35.5 million. For the community as a whole, 38% of the income generated goes to the fishing and processing sector, 48% goes to the general consumer sector (the employees of grocery stores, restaurants, retail, etc.) and the other 14% goes to workers and owners of fishing support industries (boatyards, fuel, etc.).

o The total actual household income of vessel and processor owners and employees, if the Port had completed the "modernization" scenario by 1987 was approximately $20.5 milion, up $7 million from the status quo. Taking into account the various local sectors of the economy impacted by their disposable income, the fishing industry of Fisherman's Wharf would have generated a total community impact of some $53.5 million, generating an increase of $18 million dollars to the community in just one year.

o Under the "status quo" scenario there is a high probability that the smaller fish handling firms are not making a profit. Under the "modernization" scenario, all companies, no matter what size, would show a profit.

C. Implications for San Francisco

The fishing industry offers important benefits to the City and County of San Francisco. Indeed the studies summarized above do not even take into account tremendous benefits to the City that have not been precisely quantified, such as benefits to tourism, and restaurant and business patronage by those who visit the Wharf. Furthermore, transient fishermen who patronize the harbor during lay-overs (time on shore due to a number of different reasons, including bad weather conditions, boat repairs, season closures, product price disputes or the need for R&R), like most visitors, utilize a diversity of services such as hotels, restaurants, stores, transportation and recreational facilities.

Nevertheless, funding for fishing industry projects has, in the past, been extremely hard to raise. For example, with respect to the planned Hyde Street Harbor development, past experience has shown that the market rate of commercial fishing berths is too low to attract private investment - private marina developers can readily make more profit from recreational boating projects. Projects such as the Harbor require large equity investments at a very low rate of return. Although the Port continues to actively pursue funding sources for the Harbor and other required fishing industry improvements, the Port already has tapped most sources of funds and may continue to experience difficulty gaining a larger share of funding agency resources.

The Port must pay careful attention to the economic health of the individual businesses that operate within the fishing industry. In addition, efforts must be made to reduce maintenance and expansion costs whenever possible.

V. DESCRIPTION OF EXISTING OPERATIONS AND FACILITIES

A. Operation of the Fishing Industry

At the Port of San Francisco, the commercial fishing industry primarily operates at Fisherman's Wharf in areas known as "Fish Alley" (a two-block area bounded by Jones and Hyde Streets on the east and west, and by Jefferson Street on the north), Wharf J7 (where Scoma's restaurant is located) and Pier 45. (See attached map). Overflow fish handling activities take place at Piers 28, 33 and, during the busy herring season, Pier 54. Berthing for commercial boats is generally bounded by Pier 45, the Hyde Street Pier and the breakwater. Because of increased demand for berthing, the "overflow" of commercial fishing vessels sometimes dock at Pier 39 and the South Beach Marina which were designed for recreational vessels, and sometimes at Pier 33, despite inadequate protection from ocean surges.

In a simplified overview, a typical day at the Wharf for the fishing industry begins around 4:00 in the morning. Large semi-trucks arrive at the fish companies to deliver product from other areas, and pick up large orders for either further processing at a different location or for distribution. Much of this activity occurs on Jefferson Street in the early morning hours. Sales personnel also begin making their phone calls at this early hour, collecting orders for that day's delivery. The orders are then filled, and loaded into delivery vans for distribution to San Francisco and the Bay Area. These activities are usually completed by 9:30 a.m. The rest of the day is spent filling large orders for pick up by semi-trucks the following morning or for delivery to the airport. The afternoon also is spent on maintenance and cleaning of plants and equipment, as well as office/business procedures. Fishermen, if they aren't out fishing or offloading their catch, mend their nets, bait their hooks, and make repairs to their boats and gear. Most of the tourist activity starts about 11:00 a.m., after the peak of the fishing activity of a typical day has been reached. (Flanagan, et. al.)

Vessel offloading typically takes place during the daylight hours. However, fisherman also will unload throughout the night depending on the season, the time of year, the species, the weather, quantities the fishermen are catching, and capacity at fish handling facilities.

Fish handlers are routinely open 5-1/2 days per week, with the bulk of activity occurring before noon. Most handlers need waterfront access with a wave-protected area for boat off-loading and berthing. Fish is received either from vessels or from trucks

delivering from receiving stations or processors located outside the Wharf. Fish delivered by vessel may be loaded directly onto semi-trucks for transport to larger processing facilities and possibly returned to Wharf handlers for final distribution, or may be sorted and sold directly from the Wharf. While transport to a centrally located processor may add to the cost of the final product, extensive processing at the Wharf generally has not been feasible given land values, product volumes, infrastructure requirements, and labor costs of the San Francisco urban area.

During herring season, herring are brought to the docks by a large fleet of boats. In the event fishing is extremely good, a vessel may wish to off-load quickly and return to the fishing grounds because the fishing season can be stopped as soon as quotas are met. This results in a great deal of competition for space to offload quickly at the water's edge.

Approximately 20 berths are assigned to charter sport fishing boats. This charter fleet is a key component of the fishing fleet, serving the tourist industry, sportsfishermen and the charter tour industry. Whale watching trips have become an ancillary activity for many charter boat operators.

B. Existing Fishing Industry Facilities and Equipment

This discussion of existing facilities and needs primarily is summarized from a study commissioned by the Port Commission, entitled Fisherman's Wharf Infrastructure Planning, (Carol Brown, July 1986).

1. Water-Side Facilities:

There are approximately 117 boats in berths at the Fisherman's Wharf harbor. All berths are leased and used year round. About 50 additional fishing vessels are based at the harbor, and raft up to Pier 45, Wharf J7 or moor in the harbor wherever space is available. Throughout the year, there are varying numbers of transient vessels using the harbor. During herring season, which runs from November through March, the majority of the several hundred boats in the San Francisco Bay herring fleet berth at the Wharf.

The Fisherman's Wharf berths generally are "stern-to" berths and vessel access is gained via ladders. Larger vessels also tie alongside fish handling space at Pier 45 or in front of the Fish Alley handlers for which they fish. Because their presence restricts access to fish handling facilities, they must move frequently, particularly during herring season. A fuel dock selling diesel is located within the harbor. The concession occupies approximately 10,000 square feet of space, most of which is for above ground fuel storage on Jefferson Street.

The berthing facilities were developed to serve types of vessels that are not very efficient for catching the types of fish most valuable today. The berthing facilities are inadequate by today's standards, particularly in terms of accessibility, security, protection from surge, availability of parking and storage, etc. The berthing facilities are particularly inadequate for the charter "sportfishing" tenants who do not have adequate parking, restroom or loading facilities for their patrons.

Although existing moorages are fully utilized, the majority of the Wharf's vessels with permanent berths that are licensed to fish commercially do not fish regularly and, therefore, do not maintain significant earnings. In some respects, these vessels sustain the atmosphere of the Wharf while more active boats are out fishing. Nevertheless, they do not offer regular business to fish handlers and other related businesses at the Wharf. In order to better serve commercial fishermen, supply more product to fish handlers at the Wharf and better serve the Port's charter "sportfishing" industry tenants, modern berthing and related facilities are required to accommodate and encourage more active boats.

2. Land-Side Facilities

The Port leases space at Fisherman's Wharf to many businesses directly engaged in commercial fishing or handling of fish, charter/sportfishing, and support industries (including marine supplies, fuel, insurance and industry associations). The seasonal demand for waterfront space in support of the herring season has also resulted in leases of space at Piers 33, 28 and 54. Over time, and especially since the earthquake displaced many Pier 45 tenants, these fishing industry uses outside of the Wharf area have increased.

The facilities of the typical fish handler generally include a dock area with crane for lifting cargo from vessels; a working bay with concrete floor for sorting, boxing and icing fish; truck access for loading product; cold storage and dry storage; and offices. Specialized facilities include filleting lines, smoking ovens, live holding tanks and ice making and bait processing facilities.

There is a need to develop efficient facilities that minimize bay fill, allow tenants to handle fish within individual spaces in compliance with seafood sanitation requirements, and provide maximum flexibility for changes in fish handling and market conditions in future years. To accommodate differences in operations and investments in specialized equipment by many of the existing fish handlers at the Wharf, any new facilities should assume that all specialized equipment will be supplied by the tenant.

a. Pier 45

The primary use of Pier 45 prior to the earthquake was to support the fishing industry by providing space for fish handlers.

In Sheds B and D on the west side of the Pier, approximately 75,000 square feet was leased to fish handlers and about 18,000 square feet was leased for restaurant and fisherman's storage. Also, approximately 37,000 square feet of space in the central driveways of these sheds was actively used by fish handlers for the same types of fish handling uses that occurred in the leased area. Sheds A and C were used for support space for the Red and White fleet, the submarine Pompanito, office space for other Fisherman's Wharf merchants, special events, storage and parking. After the earthquake, due to safety and structural considerations, the Port closed sheds A, B and C. The damage to Shed D was less severe and the Port was able to make temporary repairs allowing some fish companies to continue operating on a temporary basis. One bait company and one ice company also continue to operate in Shed D, providing highly valuable services to the local seafood industry and fleet. The area between the sheds, the "valley" is used for truck access and, prior to the earthquake, was used for public and tour bus parking.

After the earthquake, the Port searched for temporary relocation space for the fish companies displaced from Pier 45. Eight of the ten displaced companies requested relocation. Two companies were relocated to Pier 33, two were relocated to Pier 28, one was relocated to Pier 45, Shed D, and three companies were offered but declined relocation space. The Port spent $70,000 to convert Pier 28 into temporary fish handling facilities. The Port has refused to consider long term uses at these relocation piers because of the Port's intent to consolidate all fish handling facilities at Pier 45 in accord with the goals of fishing industry and neighborhood groups that call for revitalizing fish handling and other facilities at Fisherman's Wharf.

Prior to the earthquake, Pier 45 tenancies were short-term (30 days). Although fish handling spaces generally were adequate in size, the utility services were inadequate for long term, sanitary, efficient operations and generally reflected the short-term nature of the use agreements. These systems are being modernized in conjunction with the Pier 45 Earthquake Repair Project currently underway. Once the Project is complete, long term leases will be available for fish handling space at Pier 45.

b. Fish Alley

Fish Alley supports a wide variety of fishing-related uses including fish handling, storage, retail uses and parking. Wharf J7, which extends to the North of Fish Alley (also referred to as Pier 47) has two wings extending into the harbor. The larger, south wing houses Scoma's restaurant, fishing industry storage,

fish handling and parking. The smaller, "northern wing" is used for fishing industry parking and vessel rafting.

Fish Alley buildings reflect the needs of fish handling business 10 to 15 years ago, when small boats made numerous deliveries during the season, and the majority of the fish sales were small lots to individual customers. Today, larger and more diverse fish orders require more seafood stock on hand. To hold this inventory and to handle "peaks" in local landings intensified by fish resource regulations, handlers require more receiving and cold storage areas. Generally, Fish Alley buildings are not large enough to accommodate these changes. Some handlers have had to increase staff simply because their operations have had to expand into more than one building.

Leases at Fish Alley are long term (60 - 61 years), affording tenants greater financial incentive and opportunity to make lease hold improvements. Although such improvements are the responsibility of the tenant, the fragmented physical layout of Fish Alley, limited vehicle access and parking, and structural condition of some of the buildings have not stimulated major investment in improvements.

c. Herring Operations

Herring fishermen generally operate out of the fish handling facilities of existing Pier 45 and Fish Alley tenants and at other piers as space is available, including Piers 28, 33 and 54. The needs of the herring buyers are: sufficient frontage for vessels to dock next to fish pumps; a small receiving area; a table for weighing and grading roe samples; parking and office space. Large areas are required for box storage both before and after loading. Semi-truck access is mandatory. Parking areas for trucks before and after loading is required. Some buyers also provide net mending services and store spare parts for their fleet.

d. Gear Storage and Work Areas

Gear storage and work areas are required for an active commercial fishing fleet. The Port leases 85 lockers adjacent to Scoma's restaurant to the small boat fleet and seven spaces to large vessel operators. Prior to the earthquake, over 8,000 square feet within Pier 45 also was leased for gear storage.

Active fishermen need accessible, individual storage lockers of approximately 50 - 100 square feet each. Furthermore, most vessels have seasonal needs for a variety of specialized equipment and vessel spare parts that must be stored in the off-season. Large fishing vessels need larger storage areas and access to secure areas for rigging and repairing nets and crab pots for many days at a time. Although it is desirable to locate this type of storage

within the waterfront area, frontage is not required as long as equipment can be transported from storage to boat by truck or forklift.

e. Parking and Traffic

The lack of parking, both long and short term, is one of the most frequent complaints of members of the fishing industry using the Wharf. From mid-morning through evening, the industry suffers from intense competition for parking spaces from business and restaurant employees and patrons and tourists. Affordable, long term parking for fishermen heading out to sea is especially scarce. Vehicle access to berths and storage areas is almost non-existant.

Neither the buildings or the Wharf area as a whole lends itself well to the volume of large vehicle traffic now taking place. During the morning hours, fish distribution takes place on Jefferson Street, often causing access and cleanliness problems for other Wharf operations. Although improved handling facilities at the Wharf will permit storage of a greater volume of fish products, the need for semi-truck access to both receive and deliver cargo will persist.

f. Other Facilities

The Fisherman's Wharf area accommodates several other service-oriented businesses related to the fishing industry. Several chandleries and marine service facilities are located in the Wharf area. Over time, they have expanded their product lines to include items of interest to non-boat owners as well as yachtsmen. Because many of the vessels homeporting at the Wharf do not fish extensively, they make few purchases. An increase in the homeported active fleet will benefit marine service businesses. The on-shore support needs of the fishing industry in San Francisco include continuance of the service industries such as chandleries, bait, ice and fuel.

Restrooms, showers, maintenance and repair facilities, garbage and oil disposal facilities, pumpout facilities and harbor personnel facilities are either non-existent or inadequate.

C. Current Modernization and Expansion Projects and Plans

After years of planning and design that included input from fisheries and engineering consultants, the fishing industry and the Fisherman's Wharf Citizens Advisory Committee, the Port proposed the Seafood Center Project to guide development of fishing industry improvements at Fisherman's Wharf. It is the opinion of many fish buyers in San Francisco, and fishermen who either currently land fish in San Francisco or who would like to land fish in San Francisco, that the greatest factor limiting landings in the San Francisco area was the lack of berthing facilities. Thus, prior to

the earthquake, the Port was preparing to develop the Hyde Street Harbor as Phase I of the Seafood Center Project. The hope was that development of the harbor would spur private development interest in later phases of the Seafood Center Project.

After the earthquake, however, the Port determined that a higher priority should be placed on Pier 45 earthquake repairs in order to bring displaced fish handling businesses back to Pier 45 as soon as possible. The Pier 45 Earthquake Repair Project is currently underway. Phase I/Demolition of damaged floor slabs, utilities and improvements in the vacated sheds is complete. Phase II/Soils Compaction Grouting should begin shortly and will take 5 months to complete. Phase III/Construction will begin in late Summer. Shed A (parking) and Shed B (fish handling) should be completed in the spring of 1993. Shed C (support uses) and Shed D (fish handling) should be ready in the Spring of 1994. Because all the floors and utilities must be replaced in the fish handling sheds, the Port will have the opportunity to reconfigure the interior shed space to meet the operational and sanitation needs of the industry. In Shed A, preferential parking will be provided for both short and long term industry use.

In the meantime, the Port has begun further environmental review on the Seafood Center Project which, as discussed previously, has to be "re-scoped" and restudied because some of the original Seafood Center Project work will be completed as part of the Pier 45 Earthquake Repair Project. $300,000 has been set aside for this review. During this review process, which should take approximately one year to complete, the Port, the fishing industry, and the Fisherman's Wharf community will have the opportunity to re-examine the Seafood Center plan and to ensure that it still addresses the fishing industry's needs in the area. Some of the issues of particular concern are parking, public access and expansion of fish handling uses at Pier 45. Another issue is whether there is an area at the Wharf that could be used to accommodate the fish distribution activities that currently occur on Jefferson Street in the morning hours.

One area where the Port will focus its attention is on the development of a Fisheries and Environmental Research Institute in Shed C on Pier 45, which has been planned as a possible future addition to the Seafood Center. A study completed in December 1988 by the California Coastal Conservancy determined the need for this type of facility and urged further design, financial, and environmental studies to assess the specific uses that could be located at this facility. The concept can now be fully developed because the Port has recently received a $250,000 grant from the Federal Fisheries Promotional Fund to undertake Phase II design, environmental and financial studies. The Port intends to request an additional $9 - 10 million from the Federal Government for construction of the Institute. Uses of the Institute might include a government operated seafood inspection laboratory, offices and

research facilities for the monitoring and support of fishing, fish handling and marketing activities, additional facilities for fish handling, a test kitchen, and a small retail area for the sale of fish and related products. The plans will address the desire to provide public access in order to educate the public about the fishing industry.

D. Implications For San Francisco

Currently, the fishing industry facilities at the Port of San Francisco do not adequately meet the needs of the commercial fishing fleet, the charter "sportfishing fleet" or fish handlers. Plans for the Fisherman's Wharf Seafood Center Project were developed in order to address the needs of the fishing industry. Some planned improvements are now underway in connection with the Pier 45 Earthquake Repair Project and the Port has and will continue to make substantial investments in planning, design and environmental review for the Seafood Center Project.

The Port also has reserved up to $5.8 million to cover any funding gaps which may remain for the Pier 45 Earthquake Repair Project. Nevertheless, further funding must be identified if other Seafood Center Project improvements are to proceed. In the meantime, the process of further environmental review for the Seafood Center Project affords the Port and the Wharf community the opportunity to review whether the industry has further needs that should be addressed.

VI. CONCLUSION

The presence of a healthy fishing industry at the Port of San Francisco is recognized as an essential element in maintenance of the prosperity and colorful ambience of the Northern Waterfront. Currently, the Port's fishing facilities do not adequately meet the needs of the commercial fishing fleet, the charter "sportfishing" fleet or fish handlers. Plans for the Fisherman's Wharf Seafood Center Project were developed in order to address the needs of the industry. While some planned improvements are now underway in connection with the Pier 45 Earthquake Repair Project, further funding must be identified if other Plan improvements are to proceed.

The potential increase in the amount of fishing industry activity that could be expected in future years, particularly with the planned fishing industry improvements, is not precisely quantifiable. Significant factors, independent of the number of berths and amount of space devoted to fish handling which influence the amounts of fish landed and handled include the success of the catch of the various fisheries, limits on the number of fishing licenses issued and harvest quotas set by federal and state agencies, demand for various types of seafood, development of

markets for new species and other marketing efforts, and the financial impacts of safety and sanitation regulations on fish handling companies at the Wharf.

Port commissioned studies indicate that the amount of fish landed at the Wharf with fishing industry improvements could increase by about 20%. The amount of fish handled could increase by 10 - 20%. Improvements planned as part of the Seafood Center Project also should result in an increase in the number of active vessels homeporting at the Wharf, but not necessarily an increase in the total number of vessels.

The fishing industry offers important benefits to the City and County of San Francisco. Indeed the studies summarized in this Profile are do not even take into account tremendous benefits to the City that have not been precisely quantified, such as the benefits to tourism, and restaurant and business patronage by those who visit the Wharf. Nevertheless, funding for fishing industry projects has, in the past, been extremely hard to raise. Although the Port continues to actively pursue funding sources for the harbor and other required fishing industry improvements, the Port already has tapped most sources of funds and may continue to experience difficulty gaining a larger share of funding agencies' resources.

Although the Port of San Francisco can lobby for increased regional, state and federal participation in funding port development, the Port has had to make decisions as to land use and investment based on existing circumstances. One question presented in this current planning effort is whether land use decisions should be made based on existing conditions, or alternatively, assuming change in regulations and funding mechanisms.

VII. DISCUSSION ISSUES

There are a number of issues that the Advisory Board should consider in the decision-making process with respect to land allocations for the fishing industry.

1. Are there recent trends that would call into question the forecasts for fishing industry growth and the Port's plans to accommodate that growth? To what extent should the Advisory Board incorporate the Seafood Center Project plans in the Waterfront Plan?

2. Assuming that the forecasts are valid, what are the implications for the Port of San Francisco? Are there trends outside the Port's control that could affect the Port's ability to capture more fishing industry operations?

3. Should the Port expect fishing industry facilities to be self-supporting, or should certain costs, like those associated with the proposed Hyde Street Harbor, be subsidized?

PROPOSED QUESTIONS FOR COMMERCIAL FISHING INDUSTRY EXPERTS

1. Are there any recent developments of which you are aware that would call into question the growth forecasts for fish landings and handling activities at the Port of San Francisco?

2. The Seafood Center Project plans were developed to meet major existing and future industry needs at Fisherman's Wharf. Do you feel these plans meet these goals? Are there some aspects of the fishing industry that you believe should be further addressed?

3. In particular, do you feel that greater berthing capacity than currently planned should be anticipated?

4. Do you feel that greater fish handling capacity than currently planned should be anticipated?

5. Do you see any opportunities for expansion of existing uses? If so, is there any reason to consider relocating certain uses outside the Fisherman's Wharf area? If so, which uses? and to what areas?

6. To what extent can the fishing industry absorb the costs of proposed improvements?

7. What are the most important support uses for the commercial fishing industry? To what extent, if any, can these uses occur outside of the Fisherman's Wharf area?

8. What opportunities exist for incorporating greater public access into the Port's fishing industry facilities?

9. Are there any opportunities for incorporating greater revenue generating uses into the Port's proposed fishing industry improvements?

10. How do you forsee fish harvesting and sanitation regulations affecting the operation and profitability of the fishing industry?

PORT OF SAN FRANCISCO

SUPPORT SERVICES FOR THE CONTAINER, BREAKBULK, AND BULK CARGO SHIPPING AND HANDLING, FISHING, AND SHIP REPAIR INDUSTRIES

I. INTRODUCTION

This report profiles businesses and uses that provide support services for the Container, Breakbulk, and Bulk Cargo Shipping and Handling, Fishing and Fish Handling, and Ship Repair Industries ("prime industries") at the Port of San Francisco, including:

Ship Chandlers
Equipment Storage and Repair
Warehousing, Distribution, Consolidation and Processing
Foreign Trade Zone
Dredging
Moorage and Anchorage
Tug and Tow Operations
Bar Pilots
Boat Repair and Launch Services
Transportation Services
Employee and Customer Parking

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This profile report contains the following components:

. General market trends for the Support Services are presented, including a discussion of the factors that may affect those trends, and the implications for the Port of San Francisco.

. Regulatory issues and environmental implications associated with Support Services are identified, such as the Regional and local land use regulations, and opportunities for improving public access. Environmental issues, and the process for review and analysis of those issues, will be addressed.

. Financial and economic issues are discussed to the extent pertinent to Port of San Francisco decision making.

. Existing Support Services on Port property are described, and the suitability and sufficiency of those facilities to support current usage and future requirements is also discussed.

. The issues associated with the Support Services that must be addressed as part of the land use planning effort will be summarized. In addition, a list of questions that the Advisory Board members may want to pose to industry representatives is attached.

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II. MARKET TRENDS FOR SUPPORT SERVICES

A. Demand for Land and Facilities for Support Services

Demand for the Support Services that are required by the prime industries will depend on the growth prospects of the industries that they serve. The profile reports on the prime industries indicated high growth potential for Container Shipping; flat to slow growth for Breakbulk and Bulk Cargo Shipping and Handling, (with the exception of projected high growth potential for trade in coffee as a breakbulk commodity); limited growth for Commercial Fishing and Sport Fishing, with high growth potential for Fish Handling; and decreasing demand for Navy Ship Repair and possible increasing demand for commercial Ship Repair. (Note that the Ship Repair industry is, in part, a support service to the local cruise and cargo shipping industries, and demand for commercial ship repair may grow as those activities grow in the Bay Area.)

Demand for Port land and waterfront access areas to accommodate the businesses that provide support services is not simply a function of the growth prospects in the prime industries, but also reflects the availability of privately owned facilities that serve as an alternative to locating on Port of San Francisco property. Some of the businesses that provide support services are water-dependent, and thus must look to the Port primarily for land and facilities (e.g. tug and tow, bar pilots, boat yards). The Hunters Point Naval Shipyard and a few privately held waterfront locations are the only possible alternatives to the Port for water-dependent Support Services in San Francisco.

For those Support Services that are not strictly water-dependent there is the possibility that those uses can be located off Port property. However, other types of land uses (primarily high value commercial and residential uses) compete for the same limited land and facilities. This competition is particularly acute for those businesses that, while not truly water-dependent, must be close to the water-dependent prime industries in order to operate efficiently (e.g. Some types of cargo warehousing, and distribution.) For example, the recent rezoning of the 300+ acres in the Mission Bay area from light and heavy industry to residential and commercial uses will ultimately displace a number of Support Service businesses, including various cargo sourcing and warehousing operations as well as transportation companies. The northern waterfront area is also subject to intense competition between uses for scarce land, leading to problems for the fishing industry in particular. In addition, even where Support Services are located on land reserved for industrial or port priority use, they may be under pressure due to incompatibility with encroaching commercial and recreational land uses.

A report prepared as part of the Mission Bay project identified existing maritime related establishments, including ship repair, ship maintenance/servicing, cargo handling and storage, intermodal transport, and freight forwarding and consolidation services in the area. The report included the following chart:

Business Activity	Number of Businesses	Employment
Transportation	18	497
Warehouse and Distribution	5	32
Vehicle and Equipment Storage	4	3
Manufacturing Construction	4	108
Offices	8	39

Source: Existing Land Uses/Employment, Dept. of City Planning, September 1986.

The prime industries' requirements for Support Services vary to a certain extent. The following discussion focuses on each of the prime industries to highlight the key issues and trends with respect to the businesses that support these industries:

Container Shipping:

As discussed in the profile report on Container Shipping, if the land and facilities can be provided to accommodate the projected demand for marine terminal space, this prime industry could experience a fourfold increase in cargo volume.

One issue concerning Support Services related to the Container Shipping industry is the competition for space between the prime industry and support service uses. Space at the marine terminals is now allocated for storing empty containers and container chassis, and equipment repair services. Because that land has a long term potential for use for higher value cargo loading and unloading activities, and because moving empty containers in and out of the gate reduces throughput capacity, equipment storage and repair services may be forced off the terminal area. This trend has been identified in other growing Ports such as Los Angeles, Long Beach and Oakland.

Given the lack of available land in the City, the Port of San Francisco will have to make an extra effort to ensure that these services are available, whether on Port property or elsewhere, at a sufficient level to serve the container shipping industry. In addition, the possible eventual relocation of equipment storage and

repair uses off the terminal may have implications for labor contracts which are sometimes based on the location of the activity.

The lack of adequate land and facilities for warehousing, distribution, consolidation and processing of cargo in close proximity to the ocean terminals, and/or at a reasonable price is also a possible limitation on the ability of the Port to achieve full growth potential of container cargo shipping over the long term. For example, the Port leases space on Piers 15-17 to the Parker Warehouse, a "container stuffing" operation where cotton is received and placed in containers for export. As a direct result of that facility's location in San Francisco, two of the Port's major shipping lines, Evergreen and Cosco, are the number 1 and 2 carriers of cotton exports. While the Port accounts for only about 18% of the region's container cargo, it has captured 30% of the cotton trade. Thus, by providing the space for a cargo sourcing operation, the Port not only receives the direct rental payment (approximately $175,000 annually), but also benefits from the revenue from the shipping lines.

Some types of container warehousing and distribution operations are at a particular disadvantage in finding adequate accommodations in the City because they require rail access or involve overweight containers. For example, there is potential new business in the transloading of frozen meat from refrigerated containers to refrigerated railcars. However, because these containers exceed the State law weight limits for state highways, this type of business can only occur along Port-permitted overweight transport routes. Thus, although warehouse and distribution uses are not water-dependent, some types of operations are severely limited in terms of the facilities available to meet their operational requirements.

As discussed above, the rezoning of the Mission Bay project will have a particularly adverse impact on the supply of land for those businesses providing support services to the container shipping industry. For example, one of the largest refrigerated warehouses in San Francisco is in the Mission Bay area, as well as a number of cargo sourcing operations. In addition a number of trucking services and freight forwarders are located at Mission Bay. The report prepared as part of the Mission Bay plan indicated that some truckers there use the Port of San Francisco facilities as often as 25 times a day. The maritime related business in this area also reported that, of all of the Port's facilities, they used the container terminals most often, and also used Piers 15,27,28,38,48,50, and 54. These businesses also reported that they used or provided services to other Ports in the Bay Area.

Breakbulk

As discussed in the profile report on Breakbulk and Bulk Cargo Shipping and Handling, the term "breakbulk" includes general

breakbulk cargo, such as bags of coffee, as well as "neo-bulk" or oversized breakbulk cargo, such as automobiles and newsprint. The profile report on these cargo shipping activities indicated generally flat or slow growth, with the exception of the higher growth potential for breakbulk coffee imports now that the Port has been designated as one of three ports of entry and distribution for coffee futures.

To a certain extent, the issues concerning support services for breakbulk cargo are the same as those for container shipping. The breakbulk shipping facilities, principally at Piers 27-29 (newsprint), Pier 70 (automobiles), and Pier 80 (general breakbulk cargo) being water dependent, will as they grow ultimately compete for Port land with the businesses that provide support services. In addition, the supply of support services to the breakbulk shipping industries will be adversely affected by competition for land from commercial and residential uses, such as has occurred in the Mission Bay area.

In the workshop session on this prime industry the possibility of increasing space allocated to automobile terminal operations was explored. While it is not clear that San Francisco can be competitive with other land rich ports such as Benecia, it was clear that the Port would have to devote more land for both an auto terminal as well as land for "value added" services, such as radio installation, if the Port wanted to accommodate more growth in this neo-bulk commodity.

The other potential for increased demand for land for breakbulk support services was related to the coffee futures designation, and the industry projection that San Francisco could see between 500,000 to 1 million more bags of coffee each year once the designation is effective. If so, then this may require more water-front land for a breakbulk transit shed, to accommodate possible chartered breakbulk shipping of coffee. In addition, even if the increased breakbulk transport of coffee does not materialize as expected, increased imports of containerized coffee will increase demand for specialized coffee warehouses, such as the one operated by Western Rim at Pier 50.

Dry-Bulk and Liquid-Bulk:

Growth projections for trade in both dry bulk and liquid bulk commodities at the Port of San Francisco are low. However, at the workshop on dry bulk, the Port was encouraged to explore the possibilities for more intensive use of those facilities. Because of the nature of the commodity, warehousing, tank, or other storage facilities must be located close to the water so that the commodity can be easily transferred to the ship. Both the liquid tallow shipper, Baker Commodities and the dry bulk animal feed business at Pier 92 have storage facilities on site. These uses are particularly vulnerable to displacement as the need for marine terminal space between Piers 80, 94 and 96 increases.

Ship Repair

Ship repair is both a prime industry, as well as a support service to other prime industries. The needs of the Ship Repair industry were addressed in a separate profile report and workshop. The conclusions were that the foreseeable land use requirements are satisfied at the existing locations, with the exception of the issue of access to dry dock facilities for one of the businesses. As was the case with the cargo shipping industries, the support services that are provided to the Ship Repair industry will suffer as a result of competition for scarce land resources.

One business that provides a support service for the ship related industries discussed above is the waste oil and bilge receiving service provided by H & H Ship Service, located on Port property next to Pier 48. That use was slated to be relocated by the earlier versions of the Mission Bay Plan to be replaced by wetland/park use. Due to the support for the industry, and the difficulty associated with relocating a facility that processes hazardous materials, the Mission Bay plan was amended to accommodate that use.

Fishing and Fish Handling

In the profile report on the Fishing Industry, and at the workshop, a number of issues were identified relating to the businesses and uses that support this prime industry. In particular, the fishing industry representatives identified facilities for gear storage and parking as high priorities. The sports fishermen explained that the lack of inexpensive parking for their customers was a problem, and the Port is now working with the industry and local businesses to identify solutions to that problem. Providing adequate space to serve the fishing industry is complicated by the adjacent tourist activity, which drives up the value of land and absorbs much of the privately held land in the vicinity. Of course, the presence of the fishing fleet at Fisherman's Wharf is a key attraction for the tourist industry, and both the Port and area merchants benefit financially as a result. Again, the Port must look to the secondary financial benefits when assessing the adequacy of its return on facilities allocated to support services.

The profile report and workshop also highlighted recent changes in Federal regulation of the fishing industry that have implications for the support services and facilities which comprise the fish handling activities. One business relocated off Port property at some distance from Fisherman's Wharf, both as a result of the earthquake damage to Pier 45, as well as the need to construct a modern facility that could be adapted to comply with new sanitation regulations. Another fish handling activity for

which additional facilities will be required over the long run is for the off-loading of trucks that now occurs on Jefferson Street between approximately 5:00 a.m. and 9:00 a.m.

B. Implications for the Port of San Francisco

To the extent that the growth in the prime industries depends upon an adequate supply of providers of Support Services, the Port must attempt to meet the demand for land and facilities for these businesses, whether driven by prime industry growth or lack of appropriate facilities elsewhere in the City.

The Port's efforts in this regard will be challenging because many of the Support Service businesses vie for land that will also be needed to meet the long term needs of the prime industries. In addition, many of the Support Service businesses can not afford to pay competitive rent for their facilities, whether to the Port or a private landlord. The Port will have to take into consideration the secondary financial benefits associated with these uses in making decisions about how to allocate scarce land resources.

The fact that many of the Support Services are water-dependent uses limits the options available to the Port. For the uses that are not water-dependent, the Port may look to the City for assistance in providing protection through land use controls to preserve industrial sites, or allocating a portion of the Hunters Point Naval Shipyard for maritime Support Services. However, there are some Support Service uses that while not strictly water-dependent require specialized facilities, such as rail access or access to the terminals across local streets, and so must be given special consideration.

It is not possible to project with accuracy the precise future land use needs of the businesses that comprise Support Services. Over time, changes in the organization of Support Service businesses and the way the prime industries use them could lead to efficiencies that could affect space and locational requirements. In addition, there may be changes in the future that would improve the ability of Support Services to compete for land. Because the precise needs of Support Service business can not accurately projected, the Port's land use plan should incorporate flexibility. The Port should establish a framework for decision making, which adequately considers the direct and indirect financial consequences of land allocations between the prime industries and Support Services, as well as other appropriate land uses.

III. REGULATORY AND ENVIRONMENTAL ISSUES

A. Regulatory Issues

For purposes of the Port's land use planning effort, the

principal regulatory issues associated with the future of the Support Services include (1) compliance with Bay Conservation and Development Commission (BCDC) policies, (2) City Master Plan and zoning ordinance provisions affecting the availability of industrial uses, and (3) opportunities for public access.

1. Compliance with BCDC Policies

With respect to the land use requirements associated with Support Services, the uses most likely to involve issues of compliance with BCDC policies are (1) any proposed long term Support Service use in an area designated for near term marine terminal use or development, (2) any proposed long term Support Service use in an area designated for Port Priority use, if the support service does not satisfy the requirements, and (3) employee and customer parking on the waterfront that exceeds the minimum required or that could be provided in an upland location.

There are numerous instances where these issues have and could arise. For example, parking is an acute problem at Fisherman's Wharf, and compliance with BCDC policies may be an issue in any proposed solution to accommodate more customer and employee parking. Another example is provided by the Ship Repair and Warehousing uses at Pier 50, which must be considered interim uses because Pier 50 is designated as a near-term currently a marine terminal development site, unless and until the conditions established by BCDC for eliminating that designation are satisfied. In addition, any new Support Service use located over the water would have to demonstrate that it was a water-related use. While this would not be an issue for many Support Service businesses, some businesses that have a mixed maritime and non-water related clientele, such as some transportation services, might have to address this issue.

2. City Master Plan and Zoning Ordinance

Because the Support Service uses must look for land and facilities off Port property, the City's actions on Master Plan and zoning amendments for existing industrial areas must be given careful scrutiny by the Port. Particular attention should be given to the South Bayshore planning effort now underway, as well as the planning work that will establish the new use of the Hunters Point Naval Shipyard (if the City takes over that land.) The former Navy Shipyard could be especially appropriate for the Support Services that require water access and rail access. In addition, the proximity of the Shipyard to existing Port container terminals makes it an ideal location for accommodating uses displaced from the Mission Bay area. While there are many other uses vying for that property on a long term basis, considerable thought should be given to reserving some of the land for Support Services, and possibly prime industry uses, that could be compatible with other uses at the site.

3. Opportunities for Public Access:

For those Support Service uses located on the water, such as the Bar Pilots and Tug and Tow operations, efforts should be made to identify opportunities for public access. Although this may be difficult due to the nature of the operation and space constraints, these facilities could offer opportunities for the public to view a "working waterfront." This issue will be explored with the industry representatives at the workshop session in an effort to identify specific locations where public access could be accommodated.

B. Environmental Issues:

Environmental issues associated with the support services principally involve water quality implications from direct water use, as well as from storm water runoff from land side operations. Some uses, such as those provided by H & H Ship Service require special attention because of the hazardous nature of the materials involved. In addition, transportation services such as freight forwarders and trucking companies raise issues of traffic and air quality. If those uses are forced further away from the prime industries, there may be adverse environmental consequences as a result.

The Waterfront Plan EIR will identify and analyze the environmental implications of the possible alternative locations for Support Service uses.

IV. FINANCIAL AND ECONOMIC ISSUES

A. There are a number of financial implications associated with the Port's efforts to ensure adequate land and facilities for Support Service businesses. The Port must achieve balance between accommodating the land use needs of both the prime industries and the Support Services. Although the Support Service uses in general generate lower revenues for the Port than the prime industries, the availability of the Support Services to the prime industries accounts, in part, for the revenue generated by the prime industries. The example of the cotton warehouse discussed above shows how the presence of a cargo sourcing operation at the Port can contribute to the Port's receipt of revenue from the shipping lines that ship this commodity. Similarly, the availability of transportation services and the like contribute to the marketability of the Port to its shipping customers.

Another example of the presence of Support Service businesses generating secondary revenues is that of the Fishing and Fish Handling activities creating a visual amenity at Fisherman's Wharf, thereby enhancing revenue to the Port and area merchants through tourist related retail and restaurant establishments.

The chart on the next page shows some of the Support Service tenants of the Port, and the minimum monthly rental paid. Some of these activities generate significant rents for the Port, including the Parker Warehouse (cotton) at $14,583 per month, the Foreign Trade Zone (a duty-free warehouse) at $17,069 per month, and the Bar Pilots at $14,851 per month. However, nearly two-thirds of the businesses included on the chart pay less than $5,000 per month in rent to the Port.

The Port does not have data on the rent levels for industrial Support Services located off of Port property. One can assume as a general rule that these uses generate less return than would commercial or residential uses on the same land. In addition to potential competition for industrial sites from non-industrial uses, the Support Services must compete for source land and facilities with other industrial and warehousing uses in the City, some of which are more elucrative and maritime-related activities.

At present, the Port is able to accommodate the land use needs of both the prime industries and Support Service. However, as demand increases, with growth in the prime industries and the supply of off-Port land declines as the Mission Bay project is implemented, the Port will face tough choices in deciding how to allocate its facilities.

B. Economic Issues

There are no comprehensive studies available of the economic impacts of Support Service businesses. However, the Mission Bay project analysis of Existing Land Uses/Employment provides some insights into the employment, wage levels, and worker characteristics of maritime related Support Services. As noted above, the Mission Bay Project Area has 39 maritime related establishments including transportation services, distribution and warehousing, vehicle and equipment storage, manufacturing and construction, and office uses. These 39 business have 679 employees, with nearly 500 of these jobs in the transportation services alone. Extrapolating from the survey of all businesses in the area, these industrial based jobs tend to pay higher wages than other types of employment, possibly due to union contracts. In addition, the report noted that nearly 50% of the employees of existing businesses at Mission Bay were San Francisco residents, thus representing the possibility of further economic benefits to the City associated with those jobs.

The Mission Bay study was not able to determine where these businesses will relocate to as the Mission Bay project is implemented. Given the relative lack of industrial zoned property in the City it is likely that many of these concerns will relocate outside of the City. The Port, and the City, will have to make an effort to accommodate those businesses whose presence near the Port contributes to the efficiency and attractiveness of the Port.

FINANCIAL AND BUSINESS CONDITIONS (SUPPLEMENT)

PORT TENANT	TYPE OF USE	LOCATION	MINIMUM MONTHLY RENT
Bay & Delta Towing	Tug & Tow	15	$2,132
Bay Area Tank & Marine	Equipment Repair	80 & 92	$5,000
Christy Truck Lines	Trucking	SWL 337	$960
Coast Marine & Industrial	Chandler	SWL 302	$5,991
Colma Drayage	Tug & Tow	SWL 340	$4,836
Esprit	Cargo Distribution	SWL 343	$4,647
Foreign Trade Services	Foreign Trade Zone	19-23	$17,069
Golden State Marine	Marine Contractor	26	$2,270
H & H Ship Services	Waste Oil Processing	62 SWL 337 SWL 349	$14,851
HSF Enterprises	Cargo Salvage/Dist.	46B	$3,300
J & H Marine Industrial	Chandler	SWL 337	$6,021
John's Fork Lift	Fork Lift	80	$203
Konmatsu, USA*	Container Sourcing	SWL 337	$7,500
Maskell Marine Services	Chandler	SWL 303	$6,656
Metropolitan California	Stevedores, Equipment Storage/ Repair	80	$7,978
Nicholson's Precision	Marine Contractors	SWL 349	$2,378
O.C. Transport	Cargo Process/Dist.	SWL 337	$1,144
Pan Marine Contractors	Marine Contractors	33	$1,786
Parker Warehouse	Cargo Sourcing	15-17	$14,583
Podesta Divers	Salvage/Construction	26	$1,885
Royal Charter Marine	Tug & Tow	46 & 54	$4,831
Shaver, Harry	Tug	3	$129
S.F. Bar Pilots Assoc.	Bar Pilots	9	$17,638
Slackwater Towing & Salvage	Towing & Salvage	9	$312
U.S. Customs Service	Customs	80	0
Underwater Resources DBA	Marine Contractors	26	$1,163
Westar Marine Services	Tug & Tow	46B	$1,534
Western Rim Company	Coffee Warehouse	50	See Note
Willard Marine Decking	Marine Contractors	62	$3,443

* Currently in lease negotiations with the Port.

Note: Wharfage and dockage revenues for Western Rim Company are estimated to be $35,000 annually.

Source: Port of San Francisco (April, 1992)

C. Implications for the Port of San Francisco

Given the current levels of business activity, the Port has had little difficulty in accommodating the land use requirements of both the prime industries and Support Service businesses. In the short term, the only financial issue which this land use allocation approach raises is whether facilities devoted to maritime Support Services might yield more revenue in a commercial use, with those funds then being available for capital improvements necessary to the growth of prime industries.

Over the long term, the Port will face tougher choices in allocating land and facilities. With growth anticipated in some segments of all of the prime industries, and with a decreasing supply of off-Port industrial lands, competition for facilities will increase. Demand for large facilities with good water and/or road and rail access, where industrial uses are appropriate, is most likely to increase the most because of the high growth potential in cargo shipping prime industries. The Support Services for cargo shipping are also the most likely to be adversely affected by the implementation of the Mission Bay project.

Another related financial issue that will become more of a concern over time is that of rising maintenance costs for some of the facilities currently rented to Support Service businesses. Although some of those businesses pay significant amounts of rent, it is unlikely that most of the Support Service businesses could support the cost of major substructure repairs to the finger piers. Fortunately, a number of the facilities that are occupied by Support Service uses are on upland Seawall lots, or are located on Piers that are in fair condition. For those facilities currently in need of substantial repair, such as Pier 24, however, future use for Support Service activities is unlikely unless the repair costs were heavily subsidized by the Port.

V. EXISTING FACILITIES AND OPERATIONS

A. Description of Support Service Activities

The chart at the end of this report identifies the types of Support Services used by the various prime industries. The following section describes the types of facilities and operations that support the water-dependent industries at the Port of San Francisco.

1. Chandlery

Chandleries are stores that offer a variety of marine equipment and supplies to ocean-going cargo and cruise ships as well as small boats. In addition, they also supply provisions, such as foodstuffs, for cruise ships. While these businesses are not water-dependent, they do prefer a location close to that of the

prime industries they serve. Chandleries located within the Port's jurisdiction include Maskell Marine Services (Seawall Lot 303) and Coast Marine and Industrial (Seawall Lot 302) in the Fisherman's Wharf area and J & H Marine Industrial in the Central Waterfront area near Piers 48 and 50.

2. Equipment Storage & Repair

Businesses that provide equipment storage and repair facilities vary depending upon the prime industry they serve. For example, the container shipping industry requires storage and repair facilities for containers and chassis. Fishermen also require storage areas for gear and nets. With the exception of small boat repair facilities, these businesses and uses are not water-dependent in nature. However, at least some facilities for storage and repair should be located on or adjacent to the prime industries. In addition to providing stevedoring services on Pier 80 (North Container Terminal), Metropolitan California Stevedoring also provides facilities for equipment storage and container chassis repairs. In addition, Bay Area Tank & Marine provides equipment repair services out of Piers 80 and 92 while John's Fork Lift operates out of Pier 80.

3. Warehousing, Consolidation, Distribution, & Processing

These businesses provide space primarily for cargo storage, container stuffing and sourcing operations, re-distribution of cargo, and processing of neo-bulk cargo, such as automobiles. With the exception of transit sheds that provide interim storage of cargo near ocean-going terminals and "mast-up" storage facilities for sailboats, these types of uses are not water-dependent.

However, some warehousing and distribution facilities must be accommodated on or near Port property. For instance, due to State limits on overweight containers, the Port is permitted to designate travel routes for such containers (carrying items such as frozen meats) on local streets. As such, some warehousing and distribution space must be accommodated on or near Port property. In addition, some warehousing and distribution facilities require rail access which is most easily provided on Port property near the Southern Pacific main line. The fish handling businesses also provide a distribution service. While not all fish handling operations are water-dependent uses, fish handlers prefer to have close proximity to the water. With new regulations on fish handling, existing facilities will have to be upgraded in order to pass inspection.

The Western Rim Company operates a coffee warehouse in Pier 50 while the Parker Warehouse provides cargo sourcing services for cotton on Piers 15-17. Located across Pier 50, O.C. Transport processes and distributes hay cubes for export. Some of Esprit's cargo distribution activities take place on Seawall Lot 343 adjacent to its outlet center. The Port is currently in negotiations with Konmatsu, USA, to replace the Gerber wastepaper recycling and processing facility on Seawall Lot 337.

4. Foreign Trade Zone

The foreign trade zone is a warehouse where cargo can be stored, altered, or repaired duty-free. Even though this use is not water-dependent, it must be sanctioned by the Port. The foreign trade zone also provides an important service to cruise ships, because goods with high tariffs, such as liquor, can be purchased by the outbound cruise ships duty-free at this facility. Located in Piers 19-23, Foreign Trade Zone #3 is operated by the Foreign Trade Services.

5. Tug & Tow Operations

These businesses serve the ocean-going ships by assisting the ships into berths, as well as towing disabled ships. They are water-dependent uses and can be located anywhere on the Bay. However, at least some of these operations should be located in proximity to the prime industries in San Francisco. Tug and tow operations are scattered along the San Francisco waterfront. They include Slackwater Towing and Salvage on Pier 9, Bay & Delta Towing on Pier 15, Royal Charter Marine on Piers 46B and 54, Westar Marine Services on Pier 46B, Colma Drayage on Seawall Lot 340, and Harry Shaver's tug offices on Pier 3.

6. Bar Pilots

All ocean-going ships must be guided through the harbor by bar pilots. The pilots guide the ships from the sea buoy to the pier. This water-dependent use is represented by the San Francisco Bar Pilots Association, which operates out of Pier 9.

7. Dredging

By their nature, dredging operations are water-dependent. However, dredging companies can be located at any port within the Bay, and are not presently tenants of the Port.

8. Moorage & Anchorage

Moorage and anchorage uses are, of course, water-dependent. They are used by tankers waiting to lighten their loads to allow them access to Richmond and Benicia. The anchorage area

is designated by the Federal government. Moorage is also desirable for pleasure crafts. During the herring season, fishing boats "raft" or moor along the waterfront if berthing space is unavailable.

9. Boat Repair & Launch

These facilities are water-dependent. Boatyards serve small to medium-sized boats with waterfront facilities that permit top-side repairs and "haul-out" repairs to the bottom of the boats. Launch facilities allow small trailerable boats access to the Bay. The Profile of Boat Clubs, Boat Yards and Small Boat Services (April 7th workshop) provides an in-depth discussion of boatyards and launching facilities in San Francisco.

10. Transportation Services

Trucking companies provide important support functions to shipping and fishing industries at the Port. In addition to freight forwarding and cargo distribution services, trucking companies also return empty containers back into circulation. In addition to containerized cargo, break-bulk and refrigerated cargo are also transported by trucks. Fishing companies in the Fisherman's Wharf area rely on refrigerated trucks to deliver fresh fish to different wholesale and distribution centers in the Bay Area. While Christy Truck Lines is the only trucking company that is currently located within Port jurisdiction (Seawall Lot 337), there are a number of transportation-related companies located in the Central Waterfront area that will be displaced due to the Mission Bay Project. While transportation services are not water-dependent in nature, they do provide a valuable service to many water-dependent industries.

11. Employee & Customer Parking

Facilities for employee and customer parking are not water-dependent, but must be provided on-site or in close proximity to the prime industry. Parking is a principal concern for the fishing and excursion industries in San Francisco due to high levels of congestion in the northern waterfront. However, automobile parking is an issue that affects all of the prime industries because of competition for scarce land and BCDC regulations regarding parking on the waterfront.

12. Miscellaneous Services

While not water-dependent in nature, there are numerous specialized providers of marine-related services in San Francisco. These include underwater salvage and construction companies, such as Podesta Divers and Underwater Resources in

Pier 26, and cargo salvage and distribution companies, such as HSF Enterprises on Pier 46B. Located on Pier 62 and Seawall Lots 337 and 349, H and H Ship Services provides clean-up, processing, and disposal of marine waste oils. Other miscellaneous marine contractors include Golden State Marine in Pier 26, Nicholson's Precision Heat Treating in Seawall Lot 349, Pan Marine Contractors in Pier 33, and Willard Marine Decking in Pier 62.

B. Condition of Existing Facilities

As shown on the Chart on page 10, a number of the Support Services rent space on Seawall lots (e.g. SWL 302, 303, 337,and 349), and thus the condition of the substructure of the facility is not an issue. There are also a number of Support Service uses accommodated on the Port's finger piers. The chart on the next page identifies the piers being used for various support service activities, and an assessment of the condition of those piers.

Unlike the situation at the container terminals where the Port, as the operator, assumes the cost of facility maintenance and repair, the Port's Support Service tenants typically assume responsibility for the upkeep of their facilities. This responsibility does not extend to the substructure of the finger piers, however, and in certain cases if a tenant makes substantial improvements to the value of the Port's facilities (e.g. installs a new roof), the Port will grant rent credits in exchange for the improvements.

C. Implications for the Port of San Francisco

The facilities used by many Support Service businesses involve relatively minimal improvements, sometimes little more than a berth to tie up to with a small storage area. On the other hand, uses such as the cargo sourcing or warehouse operations, require large sheds with varying levels of interior improvements. The level of capital improvements required to sustain any of the Support Service operations does not begin to approach that required for the prime industries, such as container shipping. However, nor are the revenues from these uses comparable to what the Port obtains from some of the prime industries.

With respect to the operational issues associated with the Support Service businesses, the Port will have to take note of the particular requirements of these uses, particularly with respect to water-dependent uses, and those that require specialized facilities such as rail access. As the Port confronts increasing demand for space in the future it will be important to reserve appropriate facilities to ensure that critical Support Services can be accommodated as required.

SUPPORT SERVICE USES ON FINGER PIERS

PIER	ACTIVITY	CONDITION
3	Tug Boat	Fair to Poor
9	Bar Pilots, Tow, Salvage	Poor
15 17	Cotton, Cargo	Fair to Poor
19 23	Foreign Trade Zone	Good to Fair
33	Marine Contractors	Good to Fair
26	Marine Contractors	Poor
40	Tug and Tow	Fair to Poor
46B	Tug and Tow Cargo Salvage	Poor
50	Cargo Warehouse	Fair to Poor
80	Stevedores, Equipment Storage and Repair	Good
92	Equipment Repair	Poor

VI. CONCLUSION

The Support Service businesses not only perform critical functions for the prime industries, they are important economic enterprises in their own right. At present, the Port is able to accommodate both the land use needs of the Support Services and the prime industries, given the current levels of activity and the availability of non-Port property devoted to these uses. However, as the prime industries grow, and industrial zoned land in the City declines, the Port will face increasingly difficult choices in allocating its land. At that point, the Port must establish clear priorities to ensure adequate facilities for the Support Service uses that must be accommodated on the water or in close proximity to prime industries.

The Port should take an active role in reviewing City action on proposed amendments to existing industrial-zoned land, and encourage the City to establish policies to protect the supply of such land in the City. The planning effort underway for the re-use of the Hunters Point Naval Shipyard presents an opportunity for the Port to demonstrate the long term needs of the prime industries and the Support Services, to ensure that the planning process gives due consideration to those uses. Similarly, the Port must work with BCDC to identify long term uses for the waterfront property that will comport with BCDC regulations.

Financial issues will be critical determinants of land allocations over the long term. The ability to sustain viable Support Service businesses is important to the Port's efforts at marketing its facilities to prime industries and their customers. For this reason, the Port must identify a financial decision-making framework that takes account of the secondary financial benefits associated with the Support Services. The City, too, should consider the economic impacts associated with the failure to provide an adequate supply of industrially zoned land to meet the future needs of the water-dependent industries and related support services. As shown in the Mission Bay study discussed above, the jobs in these industries tend to be high paying, possibly union, jobs, that are available to San Francisco residents.

With respect to the facility requirements of the Support Service businesses, the needs range from small sites with minimal improvements to large warehouses with rail or water access. None of these businesses, however, will require the level of capital investment for infrastructure necessary for some of the prime industries. Even so, in the long run the Port will have to determine how to address the problem of accomplishing substantial repairs to finger piers used by these operations, given that most of the Support Service businesses can not support high maintenance costs. It is possible that eventually those piers could be

converted to uses that could support the cost of the repairs, and generate revenue to underwrite the capital investment required for growth of the water-dependent industries and their support services.

It has been suggested that when a pier can no longer sustain activity without major repairs, it should be demolished. While there are aesthetic benefits to this approach, the financial implications should also be noted. For example, the cost to demolish Pier 24, currently condemned, was estimated at $4 million, while the cost of restoring it to a viable economic use was $6 million. Given the financial requirements associated with sustaining and growing maritime commerce and industry at the Port, the demolition of potentially productive facilities, at high cost, may not be realistic as a general solution.

VII. DISCUSSION ISSUES

There are a number of issues that the Advisory Board should consider in the decision-making process with respect to land allocations for the Support Service businesses.

1. Are there other factors that should be considered, aside from growth in the prime industries, and declining availability of industrially zoned land, in assessing the potential long term demand for land and facilities to accommodate Support Services?

2. Are there industry trends toward consolidation of businesses, or increasing efficiencies that would reduce the land use requirements of the Support Services?

3. Which of the Support Services are dependent on waterfront locations at the Port of San Francisco, and which could be accommodated at other waterfront locations around the Bay?

4. Which Support Service businesses have special operational requirements such that proximity to prime industries or location on Port property is critical? Which of those industries are important to sustaining the viability of the prime industries? Might those relationships change over time?

5. What steps should the Port take with respect to City action on proposed amendments to plans and ordinances with respect to industrially zoned land?

6. Should the Port take an active role in attempting to ensure that maritime industrial uses are provided for in the long term land use plan for the re-use of the Hunters Point Naval Shipyard?

7. How can the Waterfront land use plan incorporate flexibility to allow the Port to adjust the location of Support Service tenants over time to accommodate changing needs of the prime industries and the Support Services?

8. What factors should the Port take into account in establishing a decision-making framework for allocating land in the future as competition for Port property increases?

9. How might the Port use facilities that are no longer viable for Support Service use?

PROPOSED QUESTIONS FOR SUPPORT SERVICE REPRESENTATIVES

1. How will growth in industries, such as Container Shipping, Break Bulk and Bulk Cargo Shipping, Ship Repair and the Fishing Industry affect the growth prospects for the businesses which you represent? Would growth in the industries served by the various support service businesses be impaired if there was a reduction in the availability of those service businesses?

2. Do you foresee your business being relocated as a result of changes in land use at your location, or in the vicinity of your operations? If so, what options do you believe are available to you or others in your line of business?

3. Is a location on the water, or in close proximity to the water-dependent industries that you serve, critical to your type of business? Are there other special requirements that your business has that the Port should be aware of in making decisions about land allocations in the future?

4. Are there industry trends toward consolidation of businesses or increasing efficiencies that would reduce the land use requirements of the business that you represent?

5. Are there opportunities for public access that could be provided at the site of those businesses that occupy waterfront locations? What would be necessary to accomplish that objective?

	Container	Break-Bulk Neo-Bulk	Dry Bulk Liquid Bulk	Fishing	Ship Repair		Cruise	Excursion	Ferry	Marinas Small Boat	Historic Ships
Ship/Marine Chandlers	X	X	X	X	X		X	X	X	X	
Equipment Storage &	X	X	X	X	X		X	X	X	X	X
Warehousing, Consolidation and Distribution	X	X	X	X				X			X
Foreign Trade Zone	X	X					X				
Dredging	X	X	X	X	X		X				X
Moorage				X				X	X	X	X
Tug and Tow Operations	X	X	X		X		X				
Bar Pilots	X	X	X				X				
Ship Repair Launch & Boat Repair Services	X	X	X	X			X	X	X	X	X
Employee Customer Parking	X	X	X	X	X		X	X	X	X	X
Transportation Service	X	X	X	X			X	X			

PRE-EARTHQUAKE SEAFOOD CENTER PROJECT

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PROJECT DESCRIPTION

Historic Fisherman's Wharf - San Francisco's northern waterfront between Hyde and Taylor streets - is the home of an active, colorful fleet of commercial fishing boats which work the waters of San Francisco Bay and the Northern California coast. Italian-Americans, descended from the founders of the Wharf fleet, still very prominent among the fishermen, have today been joined by a growing number of Asian fishermen, particularly Vietnamese and Korean, and others. Their catch of salmon, crab, herring and a wide variety of other species is delivered fresh to one of 17 fish companies located at the Wharf. The rapidly growing demand for high quality seafood and the increasing diversity of the harvest brought the fishing industry, the city's business community and residents, and the Port of San Francisco together to develop a plan to construct modern, efficient facilities for the commercial fishing industry at Fisherman's Wharf. They have produced the plan for the Fisherman's Wharf Seafood Center, which meets the operating needs of the fishing industry and maintains the unique character of Fisherman's Wharf.

The first phase of the plan, a 1,200 foot breakwater completed in 1986, created a 30-acre, protected commercial harbor. Within the harbor new facilities will be built for: fishing vessel berthing; support for fishermen and vessels; fish offloading, processing and distribution; seafood inspection, research, and monitoring; and public access and education. Construction of these facilities, currently estimated to cost $25 million, is slated to begin early in 1990. When completed, the Fisherman's Wharf Seafood Center will be one of the largest, most modern, and most visible commercial fishing harbors in the United States.

HYDE STREET PIER AND BERTHING

New berthing and support facilities for commercial fishermen and boats will be constructed at the foot of Hyde Street. A new 0.8-acre, fixed pier will be constructed with direct access to Jefferson Street. Extending northward from this pier, floats will be anchored for berthing vessels ranging in length from 25 feet to 60 feet. There will be 88 assigned berths with side-floats and additional areas for larger and visiting vessels. Each berth will have lockers, shore power, and water, and will be protected by a key controlled access gate, lighting, and 24-hour security staff. High water quality in the harbor will be assured by installing equipment and managing activities to eliminate pollutant discharges to the harbor.

A two-story Harbormaster's Building, with 2640 sf of floor space, will be built near the end of the new Hyde Street pier. It will house all harbor administrative activities as well as showers, lavatories and a laundromat for fishermen.

Until the Institute is developed fishermen will store gear in the space reserved for it. It is anticipated that a two-level gear storage and office component will be constructed as part of the Institute development program. The upper level offices will be leased to fish brokers, others engaged in the commercial fishing industry, and agencies supporting the industry. In addition to their proximity to fresh fish deliveries, these offices will enjoy unsurpassed views of San Francisco Bay and its bridges. The lower floor will be reserved for storage lockers for fishermen and will have forklift and vehicular access.

The public will be encouraged to visit the site and observe the working wharf. Public access will be provided along the entire eastern apron of Pier 45. This pier face is reserved for visiting ceremonial ships, most of which invite the public aboard during their stay, and for a historic submarine displayed for public visitation. The east apron would lead to the Fisheries Institute displays and possibly a public access plaza under consideration for the end of the pier. Informational displays are planned to inform visitors about the fisheries resources of the area, conservation measures, and related topics, and some of the fish handling tenants at the Seafood Center will provide windows and other viewing opportunities into their plants. A retail fish market will be encouraged in the truck loading area on weekends and at other times industry activity permits.

FISH ALLEY

The plan calls for maintaining the charm of Fisherman's Wharf by retaining the existing berthing and the familiar buildings and activities of Fish Alley along the southern boundary of the harbor. The 110 berths in the "old' harbor section will continue to be used by charter fishing boats and the historical commercial fleet. Fish Alley buildings vacated by companies that move to the new spaces on Pier 45 will be reused for gear storage and repair activities by fishermen and, perhaps, retail fish sales and educational activities for the benefit of the public.

The Fisherman's Wharf Seafood Center will lead the commercial fishing industry into the twenty-first century. It will not only provide an affordable, secure base for the San Francisco fishing fleet, it will have far wider benefits. It will supply the highest quality seafood to the local, regional and world markets and be a model for fishing harbors throughout the United States.

3/6/89

A 1500-sf, single-story Harbor Services Building on the pier will contain a marine diesel fuel station, convenience store, and shop and storage facilities for the harbor. The fuel station will use the existing, 230,000-gallon diesel storage facility. It will have three dispensers and 175 linear feet of dock, and include a sewage pump-out and oily waste disposal station.

A vessel work area and hoist for loading and off-loading gear will be provided on the northeast corner of the pier, next to the Harbor Services Building. Fifty-two parking spaces will be included on the pier for short term fishermen's parking and use by harbor staff. The public will have access to the pier during daylight hours, and public viewing areas and interpretive signs will be provided in non-work areas.

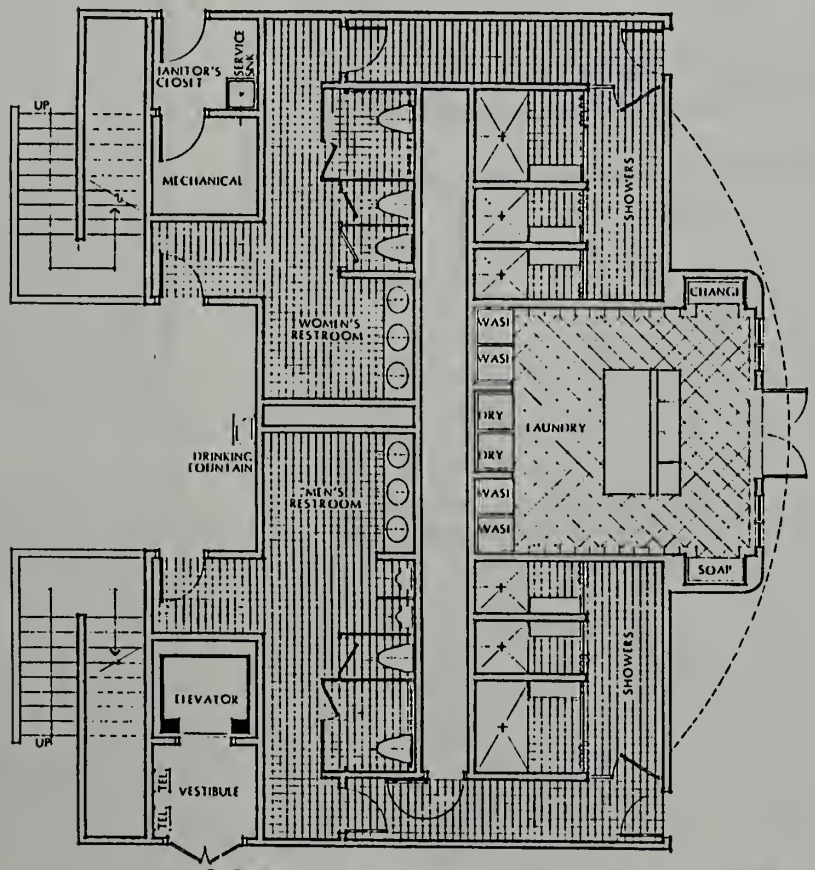
PIER 45

Pier 45, on the eastern boundary of the harbor, will contain new fish handling facilities. This 11.3-acre pier has four buildings of approximately 70,000 sf each, two presently used by fish handling companies.

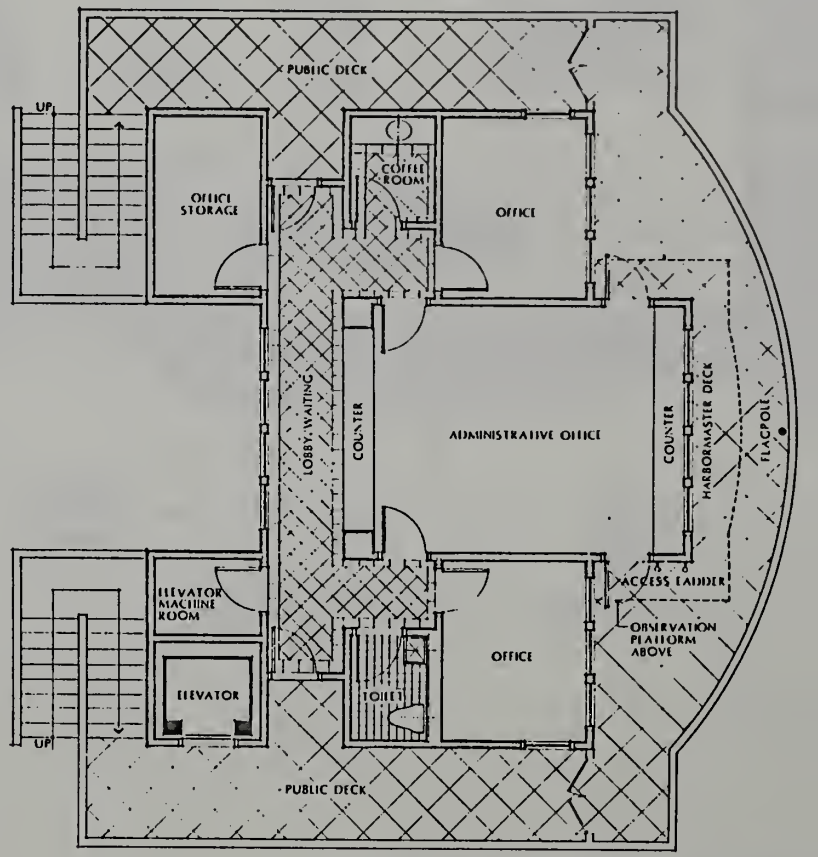
The fish handling facilities will reflect seafood sanitation regulations now being developed by the federal government for introduction in the early 1990's. The Seafood Center will be a model of practicable sanitation technology for the nation's industry. Under the plan, new utilities will be installed for the entire pier. The building shells will be renewed and concrete floors and partition walls installed to provide approximately 130,000 sf of leasable space for individual fish handling and processing and for the Center's ice supplier. Three-fourths of this space will have direct access to 1000 linear feet of water frontage for vessel off-loading and icing. The remaining 30,000 sf of fish handling space will share a common off-loading berth. All spaces will have direct access to truck loading docks along the central pier corridor. This truck service area will be reserved exclusively for vehicles serving the companies on the pier.

The southeast building will be reserved for the industry's parking, providing 236 covered spaces for both long-term fishermen's parking and Seafood Center employees and customers. The building has a separate, direct entrance from the street, avoiding conflicts with the truck service entrance.

Another feature which may be added to the project is a Fisheries Institute, now in the planning stage. The Institute will contain an array of industry support, research, monitoring and public education components. Under consideration are a seafood sanitation inspection laboratory, conference center, computer center, gear development laboratory, test kitchen and cafeteria, exhibition hall, and government monitoring and advisory services center. Approximately 30,000 sf of the pier space has been reserved for these activities, and additional space in the Fisherman's Wharf area may also be available for the Fisheries Institute.



GROUND FLOOR PLAN: RESTROOMS / SHOWERS / LAUNDRY



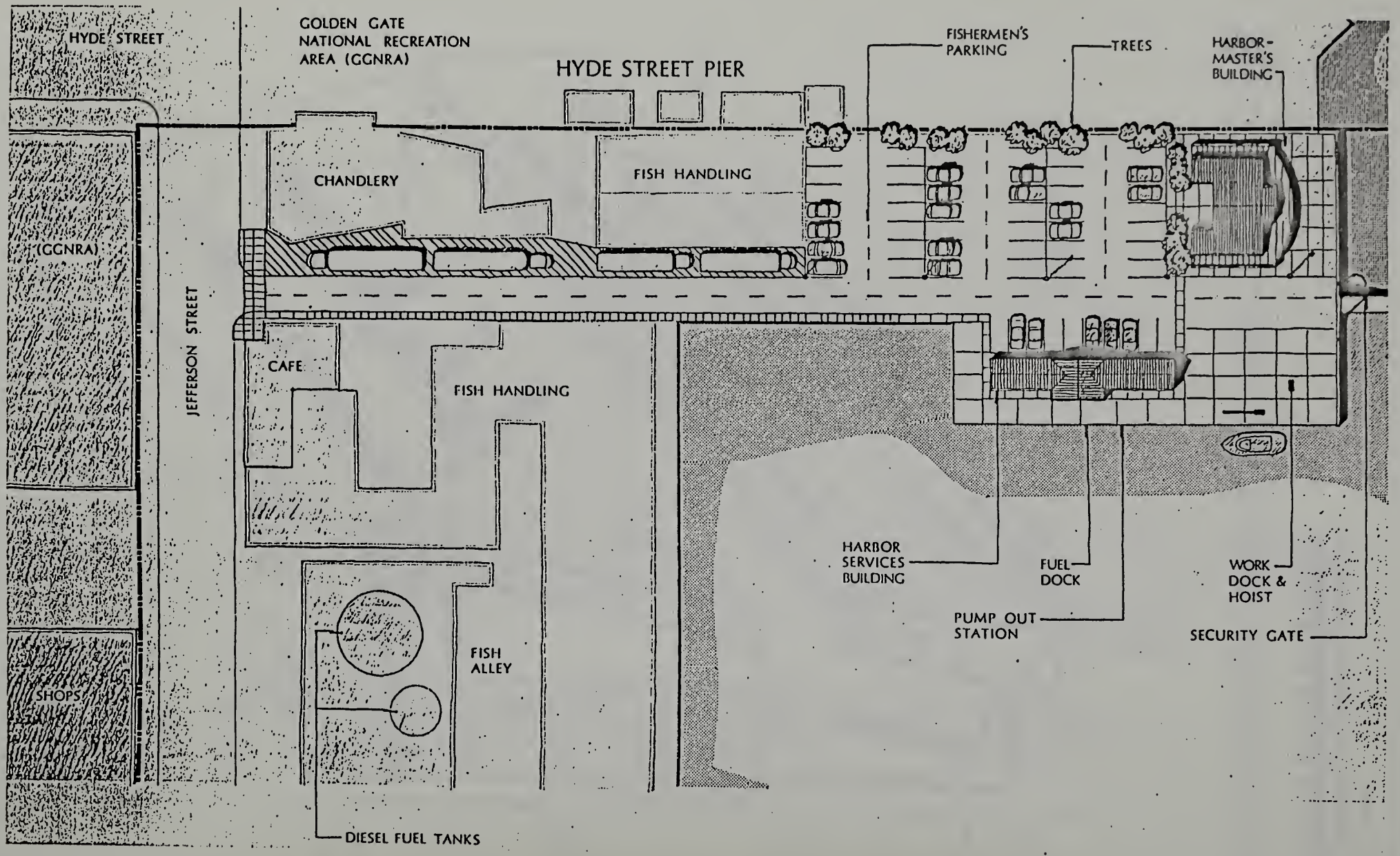
UPPER FLOOR PLAN: HARBORMASTER'S OFFICE

0 1 2 4 8 16 FEET

FIG. 11: HARBORMASTER'S BUILDING

JUNE 1, 1988

PORT OF SAN FRANCISCO



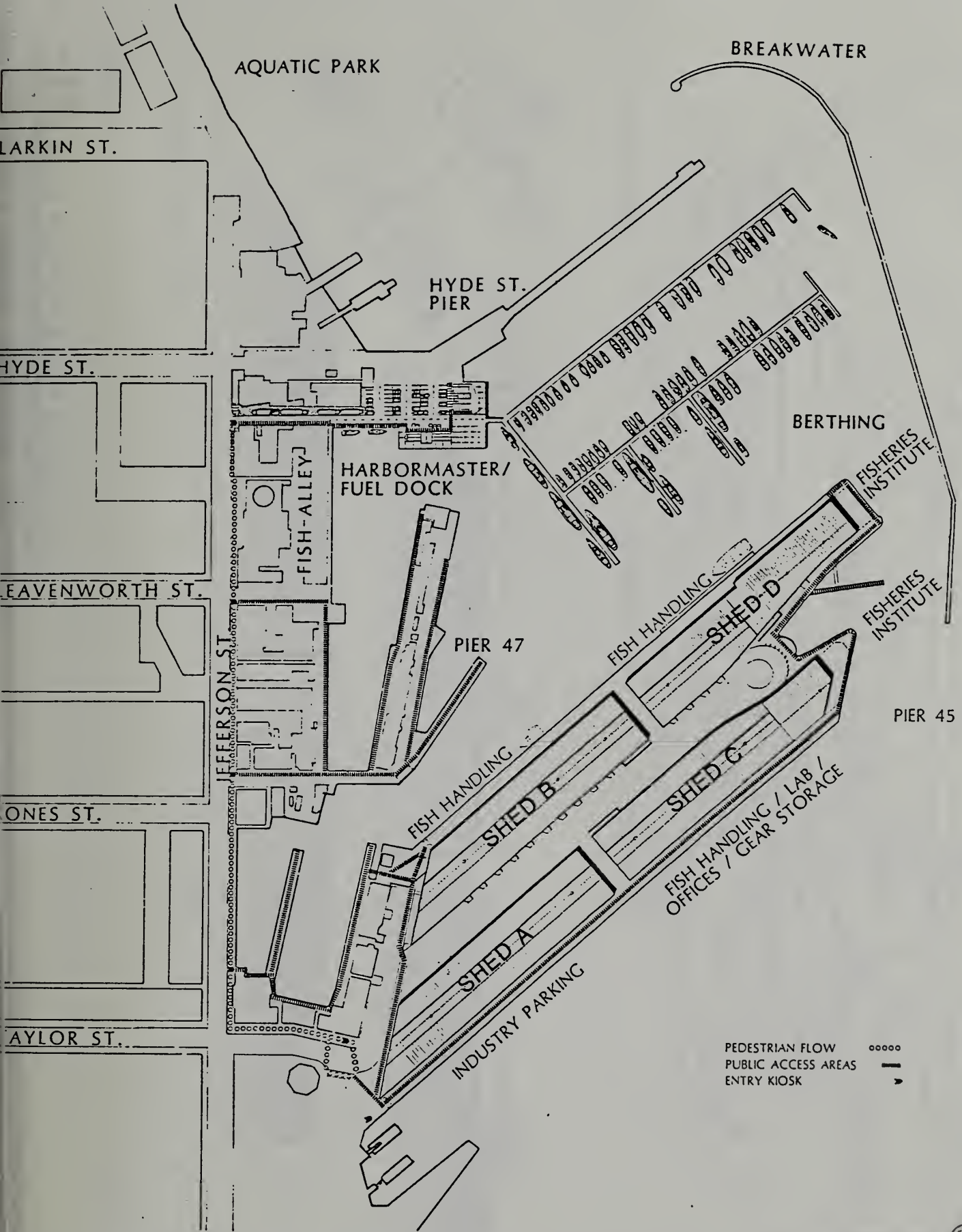
HYDE STREET PIER

0 5 10 25 50 100 FEET NORTH

OCTOBER 1988

PORT OF SAN FRANCISCO

FISHERMAN'S WHARF SEAFOOD CENTER



SHERMAN'S WHARF SEAFOOD CENTER: PUBLIC ACCESS

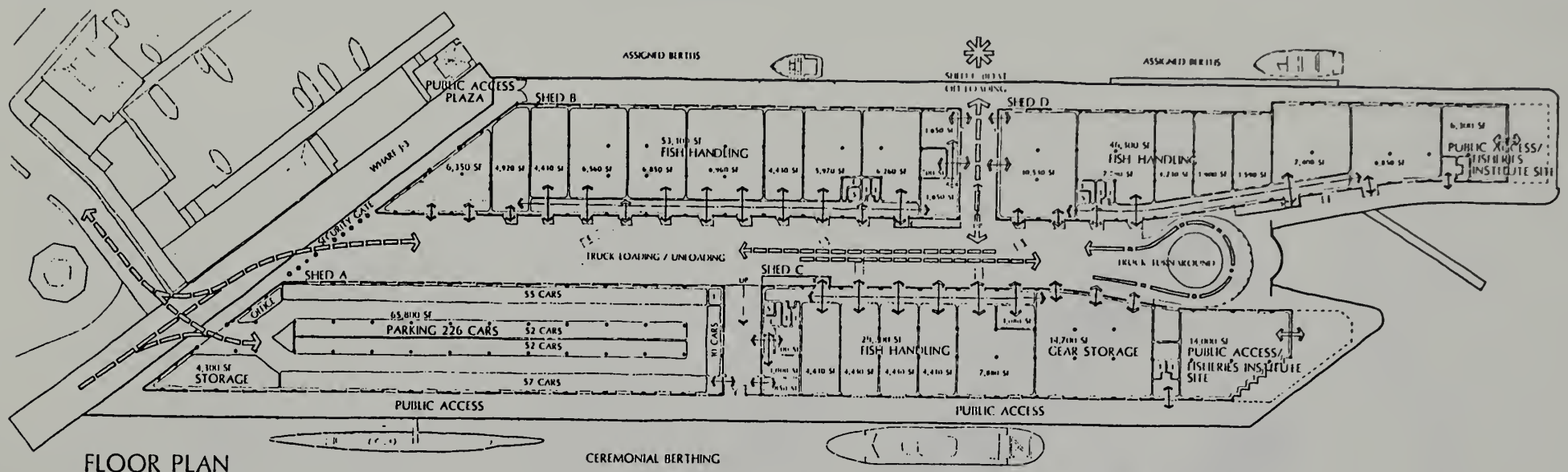
0 25 50 100 200 400 FEET

MARCH 1989

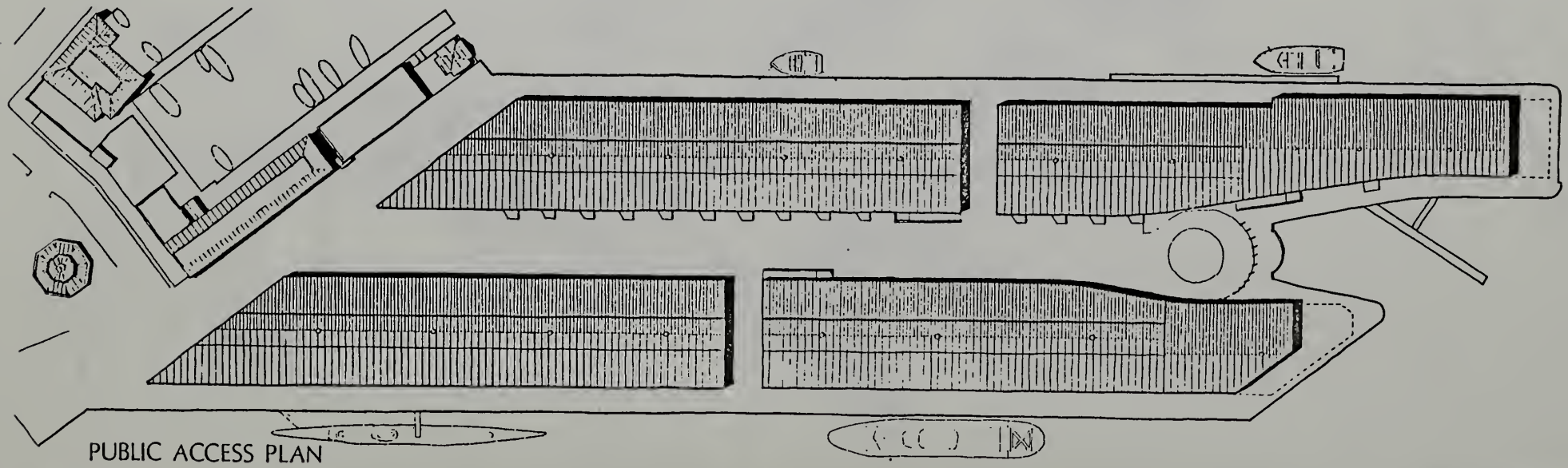
PORT OF SAN FRANCISCO

SHERMAN'S WHARF SEAFOOD CENTER

FFATT & NICHOL / AGS, INC. / KWAN HENMI



FLOOR PLAN



PUBLIC ACCESS PLAN

PIER 45

0 10 25 50 100 200 FEET NORTH

MARCH 1989

PORT OF SAN FRANCISCO

FISHERMAN'S WHARF SEAFOOD CENTER

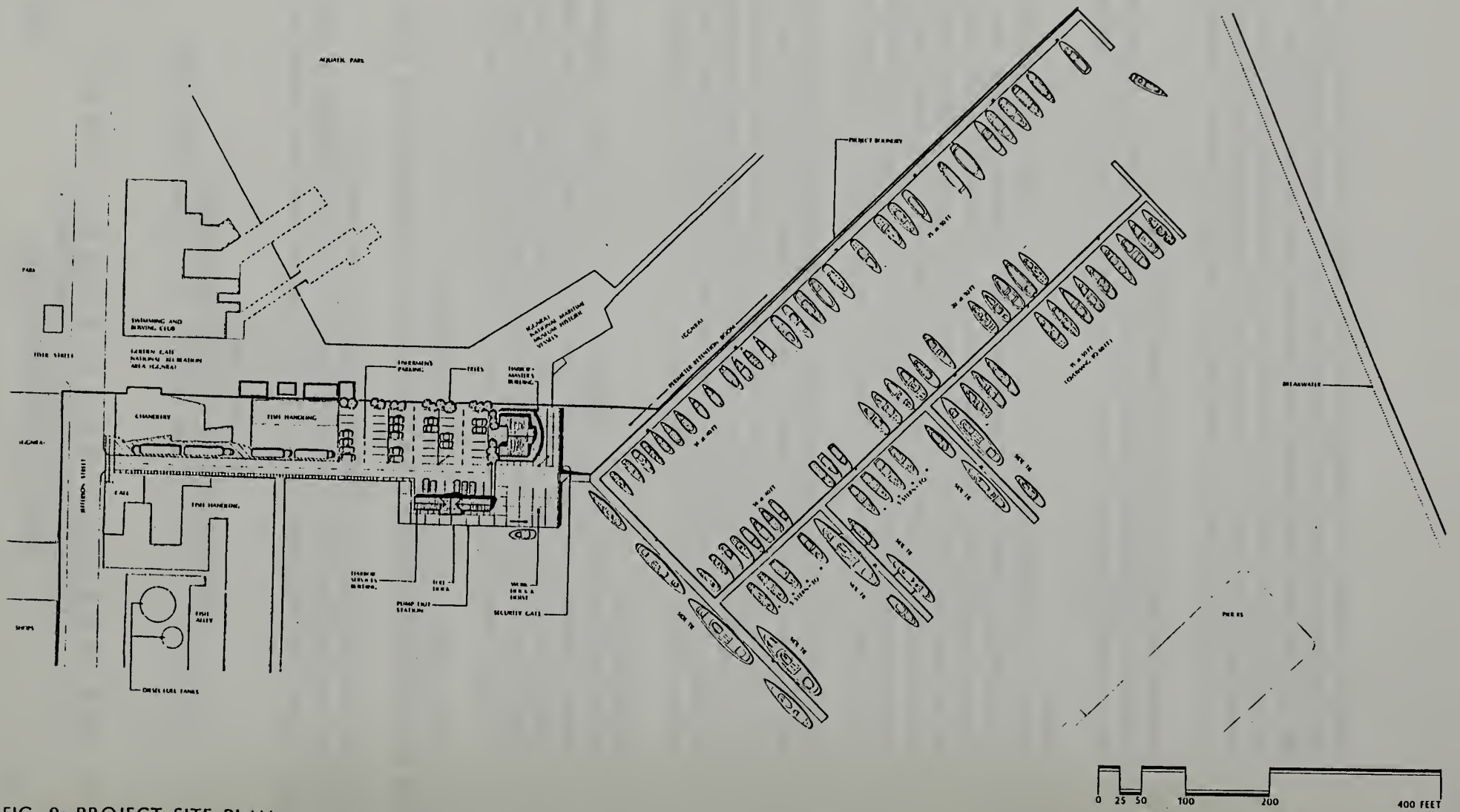


FIG. 9: PROJECT SITE PLAN

JUNE 1, 1988

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WATERFRONT PLAN ADVISORY BOARD

STATEMENT OF FACTS AND ISSUES AS TO THE LAND USE REQUIREMENTS OF HISTORIC SHIPS

(Revised 8/28/92)

The following material provides a brief statement of the facts and issues relating to the land use requirements associated with the mooring of historic ships and related support services, as identified in the profile report and in workshops with industry representatives.

I. FACTS AND ISSUES RELATED TO ADEQUACY OF CURRENT LAND AND FACILITIES TO MEET FUTURE INDUSTRY NEEDS

- The historic vessels at Hyde Street Pier attract 150,000 visitors each year, the USS Pampanito attracts 200,000, and the Museum has 450,000 visitors annually. Growth in the number of visitors to the Bay Area should lead to increases in patronage at the historic vessels. Operators of the historic vessels have identified a need for additional facilities to accommodate anticipated growth in the number of visitors, and to address deficiencies in existing facilities.

- The principal land use issue regarding historic ships concerns the possible expansion and/or relocation of the National Park Service's museum and ship berthing facilities to address the lack of space for display and storage. Park Service representatives also stated that additional space is required for boat repair shops, including 100,000 square feet of area to age timbers (although this need has been disputed) In addition to the four ships at Hyde Street, the Park Service also has three ships temporarily berthed in Sausalito and one at Fort Mason.

- The Park Service is in the process of preparing a plan that will include an analysis of alternative locations for the museum and ship berths. Two alternatives to be analyzed include expansion of the museum facilities in the Fisherman's Wharf area by taking over the Haslett Warehouse; and a private proposal to relocate the Museum and Ships to Pier 46B. The latter alternative would require relocation of the Port's maintenance department, as well as other maritime support services, such as tug boats. Proponents of the Pier 46B alternative have requested that the Port reserve the site for that purpose until a final plan is adopted.

- The USS Pampanito submarine is moored on the south side of Pier 45. The operators have requested use of 4,000 square feet of space within Pier 45 for storage, restrooms and submarine museum use, as well as some street frontage use.

- BCDC's Total Design Plan recommends that Pier 3 and Pier 24 be used to provide berths for additional historic ships. Two berths at Pier 3 are already occupied by the Fresno and the Santa Rosa Ferry vessels, which are used for office and commercial recreation purposes. Pier 24 is condemned, and rebuilding the Pier could cost as much as $6,000,000. The fact that the Klamath, an historic vessel designated for office use (moored at Pier 5), is currently vacant and the owners have had difficulty finding financially viable uses that will cover the

high costs of maintaining the vessel, may indicate that the market cannot support additional privately held vessels at this time.

- Due to the high number of visitors to historic ship attractions, the National Park Service stated that the adequacy of parking facilities would be a key consideration in the review of any proposed plans for expansion or relocation of facilities for historic ships.

- For those historic ships that are operated as public attractions, there is a locational preference by the National Park Service for sites with high visibility from the street, and easy accessibility to visitors to the Bay Area which represent a large segment of the potential market.

II. IMPLICATIONS OF REGULATORY AND ENVIRONMENTAL ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The principal regulatory and environmental issues concerning historic ships relative to the demand for additional Port land include: (1) compliance with BCDC plans and policies, particularly with respect to restrictions on parking, (2) compliance with City Planning conditions, if located within a Special Use District, (3) the possible adverse impact on water quality caused by activities related to historic ships that do not meet adopted water quality standards and (4) providing access to the disabled community.

III. IMPLICATIONS OF FINANCIAL AND ECONOMIC ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The Port's direct revenue stream from historic vessels is generated from rental charges to management organizations, either based on a percentage of ticket sales, or a flat rental rate. The projected amount of rental revenue is not expected to be sufficient enough to cover the Port's capital improvement costs necessary for the placement of additional historic vessels.

- The Port has granted rent credits for capital improvements to its facilities to the National Park Service, the Klamath and the Santa Rosa.

- The National Park Service's planning effort includes development of a business plan for development of its facilities. The National Park Service is dependent upon the federal budget for funds for new facilities, and consequently any expansion program will have to compete with other projects for appropriations. The National Park Service representative expressed doubt that the federal government would be able to afford moving the Maritime Museum to a new location. Other non-profit operations, such as the National Maritime Museum Association's operation of the USS Pampanito must rely on ticket sales, donations and grant funds to support facility improvemnts.

- Whether or not there will be additional demand for berthing space from privately held historic vessels depends on the performance of the overall economy. For example, current office market conditions have led the owners of the Klamath to seek a change to restaurant use, as the ship has been vacant since 1991.

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Historic Ships in San Francisco Profile

I. Introduction

This report will focus on historic ships and vessels moored at the Port of San Francisco. This profile includes the following elements:

> General market trends. Unlike other profiles presented to the Advisory Board, this report will differ by discussing how many visitors are attracted by the vessels and implications for San Francisco, rather than projecting potential market demand.

> Regulatory and environmental implications related to the mooring of historic ships at the Port.

> Financial and economic conditions of the organizations maintaining the historic vessels in San Francisco. This section examines the general financial requirements for on-going maintenance of the historic vessels and the financial considerations and operating issues of the various organizations overseeing the long term management of the vessels.

> Existing conditions and proposed plans for accommodating historic ships in San Francisco. This section highlights the various areas along the waterfront where historic vessels are located other land side facilities in San Francisco.

A set of concluding implications for San Francisco and a list of questions that the Advisory Board members may want to pose to the industry representatives is also attached.

II. General Market Trends for Historic Ships and Vessels at the Port of San Francisco.

A. Overall Market Trends

While other profiles have examined the potential market shares a particular industry may command, this report will summarize the supply of historic vessels in San Francisco and make an assumption that there will continue to be considerable demand for access to the vessels. Currently, the historic vessels at Hyde Street Pier attract 150,000 visitors a year (approximately 450,000 additional visitors go to the Maritime Museum at Aquatic Park), and the USS Pampanito (at Pier 45) attracts 200,000 annually.

B. Relationship to the visitor industry

Similar to the excursion and recreational vessel operations, the market for historic vessels is significantly enhanced by the presence of large numbers of visitors to the region. As a result, berths in the Fisherman's Wharf area, with its higher levels of foot traffic, are more desirable than berths located elsewhere along the waterfront. And berths with direct visibility from the Embarcadero are considered the most valuable in generating visitors.

Much like the excursion boat market, growth in the visitor industry should generally result in growth in the number of potential customers touring historic vessels. For example, growth in convention related visitors due to completion of the Moscone Convention Center expansion could result in growth of visitors to Fisherman's Wharf and the historic vessels moored there.

C. Implications for San Francisco.

1. Because of the size and strength of the visitor industry in San Francisco and its importance to the market for historic vessel tours, San Francisco will likely retain its role as the focus for additional moorings of historic vessels in the foreseeable future.

2. Because the sight-seeing tour market is dependent on the tourism industry and because of the need for a high level of visibility from the various operators, it seems likely that the number of visitors to the vessels in the Wharf would grow at a rate comparable to the growth rate in the overall tourism market.

3. Given a preference for highly visible berths with large amounts of pedestrian traffic, the point at which the Fisherman's Wharf market becomes saturated and cannot successfully support the placement of more historic vessels is difficult to determine. For example, there may be more opportunities for historic vessels berthing near new tourist attractions in other parts of the waterfront beyond Fisherman's Wharf. The Port must determine how it will approach the role of allocating berths in the Fisherman's Wharf area among different industries.

III. Regulatory and Environmental Issues

Due to the general characteristics of historic vessels being permanently moored in berths along the waterfront, and requiring access to existing or new piers, the principal regulatory and environmental issues include: 1) compliance with existing BCDC plans and policies concerning placement and use;2) compliance with historic preservation policies; 3) obtaining necessary permits from City Planning (if located in a Special Use district); 4) providing access for the disabled community.

A. San Francisco Bay Conservation and Development Commission (BCDC)

BCDC's Special Area Plan allows for a small amount of fill created by the mooring of an historic ship to be authorized for the purpose of improving shoreline appearance or improving public access to the Bay. Land uses otherwise not allowed under the provisions of the Bay Plan (such as general office, and retail establishments) may be authorized on the ship if the ship does in fact improve shoreline appearance or improve public access to the Bay. The provisions of the Special Area Plan are further modified by the Total Design Plan which highlights areas for potential moorings of four historic vessels at both Pier 3 and 24 (two berths at Pier 3 are already occupied by the Fresno and the Santa Rosa Ferry vessels).

> Public Access

Historic vessels are generally considered to provide public access and shoreline enhancement to the Bay. However, BCDC will still require any new moorings of vessels, or new facilities for historic vessels in San Francisco to maximize public access accommodations. Much like the issues raised in the Commuter Ferry and the Excursion Boat reports, BCDC in applying its maximum feasible public access rule will likely require an area around the vessel to be dedicated that will provide unrestricted access (i.e.; no admission fee required).

> Parking

One of the major land side considerations associated with visitor oriented operations such as touring historic vessels is parking. For berths in the Fisherman's Wharf area this is a particularly acute problem due to already crowded conditions and the lack of adequate facilities nearby. In addition, organized tours of the historic vessels typically bring larger groups in by buses which must be accommodated.

Existing BCDC plans and policies discourage parking over or near the Bay, even for water dependent uses such as historic vessels. To the extent that additional vessels are located in the Wharf area, additional parking facilities may be required to accommodate visitors.

B. Landmark Designation and Restoration Guidelines

Many of the vessels under the management of the National Park Service (NPS) at Hyde Street Pier and elsewhere are designated as part of the National Register of Historic places or as National Historic landmarks. If a vessel is listed on the Register or is considered a landmark, any on-going maintenance or renovations

should follow the Secretary of the Interior's Standards for Historic Vessel Preservation. Similar to the guidelines for historic structures, the standards offer examples of how to properly repair and renovate vessels.

C. Coast Guard Certification

Historic vessels may require a certificate of inspection from the Coast Guard. Certificates of inspection are required for vessels that carry freight or passengers for hire, or are "attraction vessels". Marine inspectors from the Coast Guard should be involved in the rehabilitation of a historic vessel to facilitate certification.

D. Department of City Planning

> Conditional Use Permit

Given the examples of the permanent moorings of the Klamath and the Santa Rosa Ferry boats at Pier 3, any use in a historic vessel that is not of a maritime orientation will have to secure a Conditional Use permit from the City Planning Commission. In both the Klamath and Santa Rosa examples, a series of conditions were placed on the permit by the Planning Commission ranging from limitations on parking to requiring public access on the vessels. Any proposed use of a historic vessel, other than tours, will have similar conditions placed on it and its mooring location.

> Environmental Review

While the operations at Hyde Street Pier are governed by NPS and generally exempt from state environmental law, other vessels moored along the waterfront have had to obtain environmental clearance under CEQA. In many of the recent moorings, environmental analysis has focused on such issues as the impact of the mooring on water quality, pedestrian circulation and traffic problems around the facilities. Any additional moorings will be subject to environmental review and must comply with CEQA.

E. Americans with Disabilities Act

The Americans with Disabilities Act requires equal opportunities for access for the disabled community. These requirements apply to ramping systems employed to get passengers on and off the historic vessels as well as the primary path of travel on the vessel. Placement of additional historic vessels or substantial rehabilitation of an existing vessel will have to comply with the requirements of the Act.

F. Implications for San Francisco

1. Mooring of historic vessels in San Francisco should be accessible to the public. BCDC's primary design goal is to provide maximum feasible public access to the Bay in all developments. With respect to historic vessels, improving public access is a key determinant in permitting vessels along the waterfront. Any new moorings of vessels would require public access.

2. According to existing BCDC plans and policies, parking should be allowed on existing piers to support acceptable maritime uses only if 1) there is no feasible upland alternative; 2) the parking placed on existing fill is the minimum amount necessary; and 3) the parking is located within an enclosed structure. This could present particular problems for historic vessels dedicated to both tours and other land uses that rely substantially on customers who arrive by automobile or private bus.

3. To the extent that additional historic vessels are located in San Francisco, beyond those already permitted at Pier 3 and 24 plan amendments (from BCDC) and conditional use permits from City Planning may have to be secured. Any proposed mooring will have to obtain CEQA clearance.

IV. Financial and Economic Issues

A. Overall Financial Issues

Overall, the financial condition of the historic ship industry in San Francisco is uncertain, if not poor. In the collection of historic vessels along the waterfront there are several different types of ownership, each with peculiar economic problems and constraints. Ownership and management range from governmental agencies to non-profit associations to private corporations.

Several recent events are the cause of some concern about the industry.

1. Pending sale of the Ferry Boat Klamath. The current owners of the Klamath Ferry boat have been trying to market the vessel since losing its primary office subtenant in early 1991. The current owners have approached the differing regulatory agencies about securing a change in the permitted uses within the vessel. In particular, due to the allegedly poor office market conditions, the owners are seeking authorization to establish a restaurant in the vessel.

2. Dependency of National Park Service management operations on the Federal budget for on-going maintenance of the vessels at Hyde Street pier. A recent article in the San Francisco Chronicle estimates that the vessels at the Pier can be restored in 5 to 6 years with estimates starting at $13 million. Given on-going federal budget constraints the amount of funding available to restore and maintain the vessels is uncertain.

B. Operating Financial Issues

From the operators standpoint, the major financial characteristics of the on-going maintenance and operations of historic vessels are summarized below.

Capital Expenses: Renovation and restoration of the vessels are the largest expenditures that an organization can make. Even after a substantial investment is made in a vessel, the on-going deterioration of the vessel (due primarily to exposure to the elements) over time will lead to the eventual expenditure of the same investment. The other major capital expenditures are for constructing docks and other support facilities.

Operating Expenses: These expenses typically include supplies, labor and the day to day operations of the of the vessel. Historic vessels may have higher operating costs due to the type of material the vessel is constructed with and the constant exposure to the elements. With a collection of historic vessels such as the Hyde Street Pier facilities, constant maintenance is necessary in order to prevent small, cosmetic flaws from becoming structural defects, turning insignificant costs into insurmountable problems.

In particular, the National Park Service has pointed out that the vessels are constantly exposed to storm surges, and constant wind through the Golden Gate even with a substantial breakwater to protect the harbor and vessels moored at the Pier. This exposure and the rate

of deterioration of many vessels has led to formation of a non-profit citizen group (China Basin Maritime Historical Park Committee) to urge the moving of the museum and its collection of vessels to a more protected location near the mouth of Mission Creek in China Basin (Discussed in more detail in Section 5, Description of Existing Facilities).

The proposal of moving the museum will be one of the alternatives evaluated in a yet to be released "General Management Plan" being prepared by the National Park Services Denver Service Center (a combination strategic and development plan for Aquatic Park). By National Park Service rules, the plan will have to include options and alternatives for the museum.

Port Revenue and Expenses: The Port's direct revenue stream from historic vessels is generated from rental charges to the management organizations that are typically based on a percentage of the gross ticket sales (in the case of Hyde Street Pier), or on flat rental rates for tenant space in the vessels (i.e.; Klamath or the Santa Rosa).

Much like other industries along the waterfront, the Port offers rent credits for necessary capital improvements to its facilities. The National Park Service recently demolished and rebuilt a substantial portion of the Hyde Street Pier. The value of the repair was given back to the Service in the form of a rent credit. Similar credits have been given to Klamath and Santa Rosa for capital investments made to their facilities.

C. Contribution to the Local Economy

The impact of historic vessels in the local economy is dependent on the number of vessels allowed to moor along the waterfront and uses allowed in those vessels. As a result, the historic vessel industry contributes to the local economy both directly and indirectly as described below.

Direct

> Fees or rent paid to the Port by organizations mooring and managing the vessels along the waterfront.

> Employment of San Francisco residents by the organizations in the on-going maintenance and repair of the vessels, as well as the operations of the respective organizations.

> Purchase of goods and services by operators.

> Direct spending by visitors coming to San Francisco to see the historic vessels.

> Direct spending by employees.

Indirect

> Taxes collected by the City.

> Jobs supported by the existence of historic vessels in San Francisco (i.e.; skilled repair people, maritime preservationists, support groups, and skilled laborers).

D. Implications for San Francisco

1. Operational feasibility of bringing additional vessels to San Francisco. Vessels for touring and public access will have to be brought to San Francisco under the day to day management of a financially secure organization such as the National Park Service or some other entity that has the ability to undertake daily maintenance of the vessels.

2. Revenue potential from use of vessels for other land uses not permitted in BCDC's Bay Plan. Additional revenue could be generated by the Port from mooring vessels at the permitted slips (identified in the Total Design Plan) and leasing the space out for commercial recreational activities or other land uses that are not permitted in the Bay Plan. The Port should evaluate whether there is a market for such uses and investigate the possibility of recruiting historic vessels to the slips. Additional mooring space could be identified along the waterfront and proposed as amendments to the Total Design Plan.

To the extent new vessels or existing historic ships attract visitors to the waterfront, commercial recreation tenants of the Port and the surrounding area could benefit from the additional patronage in the area.

3. Financial implications of moving the museum to China Basin. If a decision is made in the long range strategic plan of the National Park Service to move the museum to another location along the waterfront, the Port will have to evaluate the other potential sites and determine what is the best location for the facility as well as determine the opportunity costs of alternate locations given competing demands for Port facilities.

V. Description of Existing Operations

A. Historic Ships and Vessels at the Port of San Francisco.

The largest concentration of historic ships in San Francisco is at Hyde Street Pier near Fisherman's Wharf along the northern waterfront. Hyde Street Pier has been operated by the National Park Service since 1988, and prior to 1988 by the Golden Gate National Recreation Area administration. The Pier and the collection of ships at the Pier is a floating national park.

The ships currently at the Hyde Street Pier are --

Balclutha. Built in 1886. The ship is a steel hulled, three masted full rigged ship.

C.A. Thayer. Built in 1895. The ship is a wood hulled, three masted schooner.

Eppleton Hall. Built in 1914. The tug is a steel hulled paddle tug boat.

Eureka. Built in 1890 as the Ukiah (in Tiburon). The vessel is a wood hulled, double ended, walking beam paddle ferryboat built for service as a combination rail and passenger ferry.

Other Ships managed by the National Park Service but not currently located at Hyde Street Pier include --

Wapama. Built in 1915. The ship is a wood hulled, single end steam schooner. The ship is currently on a barge in Sausalito. The repairs needed on the vessel make it highly improbable that the vessel will ever float again.

Alma.Built in 1891. This ship is a wood hulled scow schooner for the bulk cargo trade. The Alama is currently moored in Sausalito with a restored tug, the Hercules.

Hercules.Built in 1907. The ship is a steel hulled, ocean going steam tug once owned by Thomas Crowley and Company. The vessel is currently moored in Sausalito.

Jeremiah O'Brien. Built in 1943. The O'Brien is a World War II Liberty Ship. The ship is currently moored at Pier 1 in Fort Mason.

Outside of the fleet owned and managed by the National Park Services, there are several other historic vessels along the San Francisco waterfront. The following describes each vessel, location of its current mooring and owner or organization in charge of managing the vessel.

USS Pampanito. The Pampanito is a World War II Balao Class fleet submarine built in 1943 at Portsmouth Naval Shipyard, New Hampshire. The submarine is open for tours daily and is moored on the south side of Pier 45. The operations and maintenance of the vessel is done by the National Maritime Museum Association.

Ferry Boat Klamath.The Klamath is a wooden hulled, double end ferry passenger vessel. The boat was built in 1925. The vessel is currently moored at Pier 5 in San Francisco. The boat is currently owned by Landor and Associates. The vessel was originally used as office space, but is currently vacant.

Ferry Boat Santa Rosa. The Santa Rosa is also a wooden hulled, double end ferry passenger vessel. The boat was built in 1927. The vessel is currently moored at Pier 3 in San Francisco. The boat is owned by Hornblower Dining Yachts. As currently configured, the upper floor of the vessel is used for the operations office for Hornblower, and the lower floor is operated as a public gathering facility. The lower floor is dedicated public access by BCDC and can be reserved for private functions during the evening hours.

Historic Fishing Vessels in Fisherman's Wharf. There are a number of older fishing vessels moored in Fisherman's Wharf Harbor that are considered historic by the Port and other regulatory agency classifications. While these vessels are not listed on the National Register or local preservation lists, the ships add to the character of the wharf and are thus valued by the business community, neighborhood and fishing industry.

B. New Locations for Historic Vessels

> China Basin Proposal

As mentioned above, China Basin Maritime Historical Park Committee(comprised of the Friends of Historic Ships and other concerned citizens) was formed in 1985 to evaluate the existing facilities at Aquatic Park and propose a new location for the museum with improved berthing space for historic vessels. The Committee's report looked at the current needs of the museum (i.e.; space and operational requirements) and the future possibilities for expansion and addition to the fleet of vessels. Among the many shortcomings of the existing facilities at Hyde Street highlighted by the Committee's proposal to move the museum are --

> lack of repair facilities in close proximity to the museum; particularly the ability to dry dock vessels of the massive size of many of the historic vessels.

> lack of display space for the both ships and artifacts under the management of the National Park Space.

> lack of public parking at Aquatic Park. the area is frequently subject to congestion given the other attractions in the area.

> lack of area to install a haulout facility, such as a marine railway or dry dock, capable of handling larger historic ships for regular inspection and maintenance or long term bottom work.

The report, "China Basin Maritime Historical Park: A Plan for a New Maritime Museum in San Francisco", proposes a location at the mouth of Mission Creek. The concept plans show the use of both sides of the inlet for mooring of vessels as well as the land area immediately south of the creek. The proposal goes on to develop a set of objectives for the new museum that entails --

> A museum and attendant facilities

> A fleet of nine vessels with space for additional ships.

> A maritime industrial park to include working facilities for the maintenance, repair, and construction of the vessels.

> A museum of maritime technology.

> A laboratory and facilities for the preservation of maritime archaeological artifacts.

The proposed location of the facility is in conflict with a proposed tidal marsh area to be created as part of the Mission Bay project. Should NPS decide to pursue the China Basin location, the conceptual plans would have to be changed in order to accommodate the Mission Bay project, or a new design proposed for the park. In addition, NPS will have to evaluate the cost of the move, sources of funding both the move and necessary capital improvements, and the ability of the new museum to be self-supporting.

The conceptual plan also envisions the demolition of Pier 46B which is currently used as the Port's Maintenance Department and Yard. A new location for the Maintenance Department as well as the many Port tenants that occupy the Pier Building would have to be found.

> Pier 24.

The Total Design Plan identifies two berths for historic vessels at Pier 24. The Plan specifies that the vessels may be used for commercial recreation purposes. There are currently no proposals to place historic vessels at Pier 24. The Pier has been condemned and public access to the facility is prohibited. Port Staff estimated that rebuilding the Pier could cost as much as $6,000,000 (in 1989).

C. Implications for San Francisco

1. Location preference of the industry. Given an operators preference for a highly visible location, with large amounts of foot traffic such as at Fisherman's Wharf, the question remains whether there are other viable locations along the waterfront that historic vessels can be moored and generate enough revenue to be self-sustaining.

2. Consolidation of the NPS fleet in San Francisco. Due primarily to a lack of repair and storage space at Hyde Street, NPS has stored several of its vessels in Sausalito. The return of those vessels to San Francisco will present both urban design considerations (blocking views and vessel arrangement) as well as physical operations needs (can the boats all be located at Hyde or should another location be found).

3. Public Access to Maritime Museum and Hyde Street Pier. As the Report for a proposed relocation of the Maritime Museum and the Historic Fleet indicates, parking (for both private autos and tour buses) is a problem limiting the number of visitors to the facility and ultimately total revenue for the operations of the vessels. With the addition of more vessels to the Hyde Street Pier and possible expansion of the museum, a suitable up-land locations for parking must be identified. The Port and other regulatory agencies would have to assess the demand and propose a parking management plan.

VI. Questions for the Advisory Board

The following questions summarize the issues associated with the operation and further enhancement of historic vessels in San Francisco that must be addressed as part of the land use planning effort.

1. Given the lack of adequate facilities at Hyde Street Pier and the Fisherman's Wharf area to accommodate increasing number of tourists to the area, are there steps that the Port can take to better accommodate the moorage of historic vessels along the waterfront ? How much land will these accommodations require ?

2. Given other factors outside the Port's control, such as the market forces affecting the overall tourism industry in San Francisco and the financial risks associated with vessel maintenance and repair, how should the Port approach land use allocation decisions for the historic vessel industry ?

3. What would be the impact of moving the Maritime Museum and historic fleet from Hyde Street and Aquatic Park to a more protected area along the waterfront ? How much land should be reserved for a such a facility ?

4. What is the desirability of incorporating commercial uses into historic vessels along the waterfront ? Should the number of moorings identified in the Total Design Plan be expanded to other areas of the waterfront ?

VII. Question for the Industry Representatives

1. Do you feel that "market" for historic vessels (for tours of the boats) is saturated, or do you feel there is potential for adding more vessels to the waterfront in San Francisco ?

2. How do you feel about mooring historic vessels away from Fisherman's Wharf ? If other locations were identified along the waterfront for moorage, what characteristics should the location have ?

3. What type of support services does the management of historic vessels require ? Is there sufficient space for such services in San Francisco ?

4. What other land use activities are compatible with the operations of the historic vessel industry that might produce revenue ? Any commercial facilities ? Any additional waterside activities ?

5. There are many examples of large maritime oriented museums around the world. How does San Francisco compare to those museums and collections of ships? What can the Port or the industry do to improve our collection vessels along the waterfront ?

6. How important is parking to your operations ? Given the restrictions on parking location and use, what options would be acceptable to the industry ?

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PORT OF SAN FRANCISCO
SAN FRANCISCO PORT COMMISSION
WATERFRONT PLAN ADVISORY BOARD

STATEMENT OF FACTS AND ISSUES AS TO THE LAND USE REQUIREMENTS OF THE RECREATIONAL WATER USERS

(Revised 8/28/92)

The following material provides a brief statement of the facts and issues relating to the land use requirements of Recreational Water Users, including recreational marinas, temporary berthing, mooring, launch and landing sites for boats and non-motorized small craft (kayaks, canoes, row boats, windsurfers), water access and water quality for swimmers, boat clubs and boat repair, storage and related support services, as identified in the profile report and in workshops with recreational water user representatives.

I. FACTS AND ISSUES RELATED TO THE ADEQUACY OF CURRENT LAND AND FACILITIES TO MEET FUTURE NEEDS OF RECREATIONAL WATER USERS

- Although existing growth trends do not indicate an increase in demand significant enough to justify development of new recreational marinas, industry representatives encouraged the Port to take a long term view because such developments require a long lead time. Currently, there are vacancies for larger boats at existing marinas, however, there is a substantial shortage of berths for smaller boats.

- The lack of sufficient public launch facilities for both trailerable boats and non-motorized small craft was also identified as an existing deficiency. There is also current unmet demand for dry storage space for trailerable and non-trailerable boats. A launch ramp and dry storage for trailerable boats should be combined at one location on the waterfront. Non-motorized small craft require a soft launch and landing site, but could potentially share other facilities with trailerable boats, such as parking, storage and services.

- There is only one public launch, it is currently out of commission because of storm damage to the dock, and it is poorly designed and undersized. In the interim, private clubs are being used by the general public creating congestion and liability problems for the clubs. There is also a need for additional space for trailer parking in the vicinity of the launch. A condition of a grant for repairs to the launch may be a requirement that 20 spaces be designated for boat trailer parking. Additionally a proposal for a motorized and non-motorized public launch facility at Islais Creek is being planned. The facility would include public amenities such as bathrooms, parking, and a boathouse.

- Additional facilities are also required to meet existing boat repair and haul out needs of recreational boaters. The lack of a hoist for sailboats was identified as a particularly problem. Existing operators of boat repair and storage facilities expressed an interest in expanding operations at current locations. The swimming and rowing clubs located at Aquatic Park have active boat repair programs for their own wooden boats only. Representatives noted that there are only two fuel docks between the Golden Gate Bridge and Candlestick, and one is barely accessible and the other is difficult to use.

- There is also an acute deficiency in the adequacy and availability of temporary berthing and mooring locations. Minimal facilities for mooring and berthing would be inexpensive to provide, however, there are liability issues that have to be considered as well. Preferred locations include the northern waterfront, and near the boat clubs between Piers 50 and 64.

- Existing operations for recreational boaters are concentrated on the northern waterfront, and near China Basin along the southern waterfront. The boat club representatives stated that their facilities were adequate to meet the needs of the boating community into the foreseeable future. Representatives of the small boat community have proposed that future facilities, particularly temporary berths, an improved public launch and shore side services, be provided in the China Basin area. That area is now underutilized by kayakers, rowers, windsurfers and swimmers, due to the lack of minimal required facilities (parking, storage, launching and water access.) The warm weather and protected waters make this area desirable for those uses.

II. IMPLICATIONS OF REGULATORY AND ENVIRONMENTAL ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The regulatory and environmental issues associated with recreational water users that may affect the demand for additional land include: (1) BCDC regulations may limit the ability to provide parking and dry storage near the waterfront, (2) the possible adverse impact on water quality from recreational marinas and boat repair uses that do not meet adopted water quality standards, (3) water quality conditions and other safety issues must be addressed before additional areas are designated for water contact sports, (4) compliance with storm water and other water quality regulations may reduce the viability of boat repair operations, (5) regulation of dredging has resulted in restricted access to one boat repair operation, and may complicate efforts to provide expanded or additional facilities elsewhere, and (6) compliance with the American Disabilities Act and State regulations for handicapped access may limit the financial or locational feasibility of marinas, temporary berthing and landing facilities.

III. IMPLICATIONS OF FINANCIAL AND ECONMIC ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The principal value of these uses is in enhancing recreational opportunities and access to the waterfront. Subsidies are required to provide additional marina space, as well as public launch space. Dry storage and boat repair facilities and services to users can generate revenue.

- Precise estimates are not available for most of the uses identified as necessary improvements by the small boat community. However, it is known that new marina development would be very costly ($ 8 - 12 million) because of the need for a breakwater to create a protected harbor. Such high capital costs can not be recovered without some external subsidy,either through grant funding or by mixed use development with commercial uses.

- The cost of repairing and making moderate improvements to the public boat launch is estimated at $500,000. The Department of Recreation and Parks is preparing a grant application for that project. In addition, small boat facilities may be developed with public funding on park land at India Basin, and with private funding at public parks in Mission Bay and Islais Creek.

- Facilities for non-motorized craft and swimmers access could potentially be developed in tandem with public boat launch and dry storage facilities, with part of the cost being recouped through direct user fees and from businesses supplying food, equipment, lessons, etc.

- There are several sources of grant funds or low cost loans that may be available for developing facilities for recreational water use. In addition, to the extent that these uses enhance public access, some facilities may be developed as mitigation for other waterfront projects subject to review by BCDC. Moorage and temporary berthing facilities are an example of a use that is frequently provided by profit-making uses such as restaurants. That type of arrangement may also address the liability insurance issues associated with that use.

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PORT OF SAN FRANCISCO

SMALL BOAT MARINA PROFILE

I. INTRODUCTION

The San Francisco Bay is one of the most exhilarating places in the world for recreational boating. Bay waters are used regularly for a variety of boating activities, including cruising, racing, and other recreational activities. This report presents a profile of small boat marinas for recreational boaters on San Francisco Bay. It includes the following:

* General market trends for small boat marinas in the San Francisco Bay. The discussion includes an examination of recreational boating trends and their implications for the Port of San Francisco.

* Regulatory and environmental implications associated with marina development and operation in the Bay Area. This includes a discussion of public access issues, live-aboard and houseboat marinas, parking requirements, land use compatibilities, and environmental considerations associated with marinas.

* Financial and economic conditions of small boat marina development and operation in San Francisco.

* Existing conditions of the San Francisco marinas are described, and the suitability of those facilities to support current and future recreational boating needs.

Each section of the report concludes with a presentation of issues and implications for the Port of San Francisco. There is also a list of questions at the end of the report that Advisory Board members may want to pose to the industry representatives.

II. GENERAL MARKET TRENDS

Recreational boating is a popular activity in the United States. In 1988, approximately 73 million (or 1 in 3) Americans engaged in some type of recreational boating activity while 15 million (or 1 in 20) actually owned at least one recreational boat. For that same year, California ranked second in the number of boat registrations in the country, with over 735,000 registered boats. This figure has increased to over 802,000 by 1991.

A. The Market Area

The viability of marina development depends significantly on the location of the marina. Generally, boaters prefer marinas that are in close proximity to the water conditions that are most suitable for the type of boating activity. While the San Francisco Bay is an attractive location for a variety of recreational boating activities, the area's climate, winds, and geography are really suited for sailing as opposed to motorboating activities, which are more prevalent in the Delta region. Because sailboats require areas with sufficient wind for propulsion, the only location in the Bay Area with a combination of such winds and large open areas (such as for racing activities) is at the entrance to the Bay near Alcatraz Island. The same type of wave conditions compounded by cold waters, a foggy climate, and heavy levels of maritime traffic are not conducive to motorboating. As a consequence, the closer a marina is to the entrance to the Bay, the higher the likelihood that there are more sailboats than motorboats using that marina. As a group, the three major San Francisco marinas, which includes Pier 39 Marina and South Beach Harbor (under Port jurisdiction) and the San Francisco Municipal Marina (outside Port jurisdiction and operated by the San Francisco Department of Parks and Recreation) have more sailboats than motorboats, as compared with the San Leandro Marina, which has a more even distribution.

For comparison purposes, the San Francisco marinas are located within a Bay Area market, which stretches as far north as Vallejo, and as far south as San Leandro. It includes the counties of San Francisco, Marin, Sonoma, Napa, Alameda, Santa Clara, and San Mateo. This market is different than the predominantly motorboating market in the Delta region, which includes parts of eastern Contra Costa and Solano counties as well as the Stockton and Sacramento areas.

However, marina berthing within the Bay Area market are segmented into submarkets that are affected by location. The composition of berths found at Pier 39 Marina, South Beach Harbor, and the San Francisco Municipal Marina reflects a distinctive segmenting between vessel types. For instance, the Municipal Marina's location near the gateway of the Bay is reflected in high numbers of berthing by racing yachts and sailboats. Pier 39 Marina has a different composition of boats that is balanced between sailboats and motorboats. Its location near Fisherman's Wharf is popular with yachts on excursion trips along the West Coast or within the Bay. There is also a large contingency of motorboats at Pier 39 reflecting the marina's proximity to fishing and

Table 1:
Marina Facilities in the 9 County Bay Area (1987)

County	Number of Berths	Number of Moorings
San Francisco	2,093	68
Marin	4,266	135
Sonoma	715	10
Napa	1,483	24
Solano	1,826	53
Contra Costa	7,091	20
Alameda	6,491	21
Santa Clara	489	10
San Mateo	3,412	204
TOTAL*	24,276	502
DELTA TOTALS	10,778	166
SOUTH COAST**	40,604	1,782

* Includes parts of Solano & Contra Costa Counties (Delta Market)
** Includes Ventura, Los Angeles, Orange, & San Diego Counties

Source: California Resources Agency, Department of Boating & Waterways

Table 2:
Number of Registered Pleasure Boats in Bay Area Market

County	1975	1980	1985	1990	1991
S.F.	5,019	5,137	4,426	4,748	4,341
Marin	6,167	7,436	8,502	10,261	10,284
Sonoma	6,941	9,145	11,100	16,431	17,392
Napa	3,260	3,874	5,230	6,206	6,495
Alameda	22,768	25,995	28,515	31,722	31,758
Santa Clara	25,930	30,406	31,672	33,078	32,089
San Mateo	11,790	13,780	14,135	15,513	15,053

Source: California Department of Motor Vehicles

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recreational areas outside the Bay Area in the Farallon Islands, aswell as within the Bay and inland areas in the Delta region. On the other hand, South Beach Harbor's location farther south attracts sailboats (by a four to one margin) owned mostly by local San Franciscans, who desire a safe, attractive, and convenient storage location, and who may go on occasional pleasure cruises around the Bay. In addition, larger luxury yachts can be found in the three marinas. While these yachts may be used for extended cruises outside of the Bay, they are just as suited for entertainment, dining, and sightseeing around the Bay.

Another factor contributing to the viability of marinas is transportation accessibility from inland areas. Because the mode of travel from home to marina is usually by automobile, the location of freeways and expressways near marinas is a locational factor that affects the marina's market area. Accessibility includes not only the travel time but also the distance between home and marina.

While San Francisco's market area is unlikely to change in the near future, projections for berthing space demand in the Bay Area has been both out-of-date and unreliable. This is due in part to the inherent difficulties in accounting for a variety of independent factors. These range from changing national policies and regulations, to regional differences in climate, geography, and economic health, to local recreation and market patterns and demographics. In addition, like other leisurely pursuits, the attractiveness of recreational boating depends on trends in the levels of personal disposable income, the amount of leisure time, recreational alternatives, lifestyle patterns, and such intangible factors as popular tastes and perceptions. Without an exhaustive study, a general understanding of market trends is possible through an examination of historical trends, existing conditions, and San Francisco's position in the Bay Area recreational boating market.

B. Trends

Historically, the success of recreational boating in the Bay Area was the result of demographic changes, technological breakthroughs, and the strength of the economy. The booming American economy in the 1950's increased the level of disposable income for many. Along with advances in manufacturing processes, engine development, and the use of new fiberglass materials, recreational boating was no longer the pursuit of the wealthy. The entry into retirement of World War II and Korean War veterans in conjunction with the importation of small and inexpensive sailboats from Taiwan helped create the first boom in sailing by the late 1960's. As demand increased in the 1970's, the entry of larger cruisers that did not require extensive training, skills, nor money, attracted new retirees into sailing.

Despite increases in fuel prices and inflation, recreational boating continued to expand in the Bay Area, partly due to the development of the ultralight sailboats in the late 1970's, which attracted a younger generation of people with the appeal of speed and prestige. With increasing numbers of boats in the Bay, an excess demand was created for berthing facilities in the Bay Area.

Existing marinas were unable to accommodate the increased numbers of sailboats, or were simply out-moded in their facilities due to the increased lengths of the newer boats. New marinas, including the Pier 39 Marina and South Beach Harbor were constructed due to the peak in demand in the late 1970's and early 1980's. (Table 1)

Since the early 1980's, interest and demand for berthing slips have waned due to a variety of factors, including an oversupply of berthing slips in marinas, competition from other recreational activities, increasing costs to keep and maintain boats, declining interest levels, and, to some extent, disenchantment with the rigors of sailing. The number of registered pleasure boats in San Francisco has actually declined from 1975 to 1991 as opposed to that of the other counties in the Bay Area market. (Table 2) Nevertheless, despite the current downturn in the regional economy due to the recession, the market for recreational boating is stable, and there are opportunities for expansion due to the aging "baby-boomer" generation with increased disposable income and leisure time.

Currently, the existing berthing slips are sufficient in accommodating the overall demand for berthing facilities in the Bay Area market and will probably continue to be so in the near future. However, if demand is segmented by boat size, there is a shortage of berthing slips for boats less than 30 feet in San Francisco. Due partly to the increasing average size of boats in the late 1970's, newer marinas, such as Pier 39 and South Beach, were designed and constructed with a greater emphasis on berthing slips for larger boats (greater than 26 feet). However, the average length of boats in the Bay Area today is less than 26 feet. This is due to a combination of factors, including increasing costs for the purchase, operation, and maintenance of boats, to the inclusion of motorboats in records, which tend to be shorter than sailboats, as a recreational boat type. Statewide, half of all registered boats in 1991 are less than 16 feet in length while 94% of all registered boats are less than 26 feet in length. (Table 3)

Currently, high occupancy rates at Pier 39 and South Beach (85 and 80 percent respectively) are not indicative of an underlying shortage of slips less than 26 feet nor the lack of demand from larger-sized boats. Because there is significantly higher demand by boats less than 26 feet for berthing slips at South Beach and because there were only 20 slips of 26 feet constructed, there are about 120 boats less than 26 feet occupying and paying for larger slips. As a result, the waiting list for the 26 feet berthing slips is over 100 years long. In contrast, there are 200 slips between 26 and 30 feet at South Beach, and the waiting list for these slips is just over one year. Even in the San Francisco Municipal Marina, where about 37 percent of the slips are less than 25 feet, demand for these berthing sizes is so strong that the marina has closed its waiting list. Pier 39 does not maintain any waiting lists. While marinas can certainly accommodate smaller boats in larger berthing slips, the existing disparity in rental rates at some marinas raise issues of equity for owners of smaller boats who may desire berthing. As a result, small boat owners

often "overpay" for berthing. As an example, because Pier 39's lowest berthing rate is set for 36 feet slips, a 26 feet boat is charged for an additional 10 feet of berthing slips.

Occupancy rates of marinas in the Bay Area market have stabilized in the 60 to 85 percent range. This is a reflection of sales and registrations of new recreational vessels, which have been flat since the mid-1980's due to the imposition of a 10 percent luxury tax on boats over $100,000 as well as the onset of the recession. Any future increase in sales would probably be in the motorboat market, as motorboats are generally more affordable to purchase and perceived by many to be easier to learn and operate than sailboats.

With escalating costs involved with the ownership, operation, and maintenance of recreational boats, the use of share-time partnerships, rentals, and boat clubs could increase significantly in the future. However, these areas of growth, like that of used boat sales, are not correlated with increased berthing space demand as they rely upon an existing supply of boats.

Another recent trend is San Francisco's popularity as a destination attraction for short-term visits and excursions. Short-term or temporary berths usually accommodate weekend or half-day stays by Bay Area residents, or they serve as transit stops for visitors on longer excursions along the West Coast. Short-term berthing facilities at Pier 39 and South Beach have been especially popular. The two marinas can accommodate most requests for short-term berthing through their supplies of vacant berths. However, high demand for short-term berthing during holidays and certain weekends during the year may necessitate advance reservations and waiting lists. Pier 39 and South Beach typically accommodate 20 to 30 vessels requiring short-term berthing per week. The charge for these facilities ranges from $10 for four hours at Pier 39 to $10 a day at South Beach. As discussed further in the profile on Boat Clubs and Boat Yards there are not enough free short term berthing or mooring opportunities compared to other waterfront communities such as Oakland, Alameda, Sausalito and Tiburon.

Boating offers a relatively inexpensive and exciting mode of transport into the city, where visitors can bypass the congested roadways and take an approach that is esthetically pleasing and relaxing. With the city's ever-increasing role as the cultural attraction in the Bay Area, this trend is expected to continue in the future.

C. Implications for San Francisco

Recreational boating, particularly sailing, has a viable position within San Francisco currently, and will probably continue in that manner in the future due to San Francisco's proximity to the Bay's best sailing areas and the city's role as a destination attraction for boating visitors. On the other hand, existing trends do not indicate that there is sufficient demand for berthing facilities in the Bay Area market to justify the development of new marinas, especially in San Francisco. However, the shortage of

Table 3:
Composition of Registered Boats in California by Length (1991)*

Size	Number of Boats	Percent
Less than 16' 0"	404,441	49.6
16'0" to 19'11"	267,361	32.8
20'0" to 25'11"	94,859	11.6
26'0" to 39'11"	41,814	5.1
40'0" to 65' 0"	6,489	0.8
Over 65' 0"	773	0.09
TOTAL	815,737	99.99**

* Registered boats include motorboats, sailboats, rowboats, canoes, jet-powered, and other miscellaneous other types.

** Due to rounding error, the percentages do not add up to 100 percent.

Source: California Department of Motor Vehicles

2. Live-Aboard Boats

Due to the public trust limitations on waterfront uses, there has been concern over live-aboard boats that are sometimes moored in the same marinas as recreational boats. A live-aboard boat is defined by BCDC as a boat that is "used or capable of being used for active self-propelled navigation moored for an extended period of time and used during that time as a private principal place of residence." Under BCDC's Bay Plan, the Commission is authorized to allow up to 10 percent of a marina's berthing space for live-aboard boats. However, because recreational boats are occasionally used for residential purposes, such as on weekends or when in transit from one port to another, the permitting process applies only to those boats that are moored for an extended period of time, and used during that time as a principal private residence. The Pier 39 Marina recently received approval for 35 live-aboard boats. A small group of live-aboard boats can also be found in Islais Creek near Third Street, but these uses are not recognized nor approved by the Port and BCDC. South Beach Harbor has no live-aboard boats.

3. Houseboats

Unlike live-aboard boats, houseboats are designed and used primarily as permanent floating homes. BCDC defines a houseboat as "a boat or structure moored in the water and used for private residential or another non-water-oriented use and not used for active navigation." As such, the construction of new houseboat marinas within its jurisdiction is prohibited by the Commission while existing houseboat marinas are authorized only under certain restrictive conditions. The Mission Creek Harbor Association operates 20 houseboats under a long-term agreement with the Port.

4. Ancillary Uses

Parking is a necessary supporting use for marinas. Recreational boaters require temporary parking for personal automobiles as well as those of guests and visitors. Recent surveys indicate that providing parking at a ratio of one parking space for every two berthing slips is sufficient to handle most marina-associated parking needs, even on peak periods of marina use, such as on weekends and holidays. In addition, a marina's proximity to commercial uses could facilitate shared parking by providing ample parking spaces for use at different times of the day. However, the concern over parking is over the location of the parking facilities. Oftentimes, parking lots are constructed immediately next to marinas, and as a result, hinder public access to the water. A location farther inland may still be viable if sufficient drop-off areas are provided adjacent to the marinas. These areas would allow marina users to load or unload boating gear, foodstuffs, and other supplies. A parking garage across the Embarcadero provides shared parking for users of the Pier 39 Marina and commercial establishments. At South Beach, a 350 space parking lot is currently planned on a portion of Pier 46B and Seawall Lot 335 as part of the proposed South Beach Park that is immediately adjacent to the marina.

berthing facilities for boats less than 26 feet raises affordability issues for small boatowners desiring berthing in San Francisco. While additional facilities may be necessary for short-term berthing (in existing marinas and adjacent to existing and new developments), it is questionable whether there would be sufficient demand to justify new marina construction, given the ability of existing marinas to accommodate requests for short-term berthings through normalvacancies. Even if demand for additional berthing space increases significantly, San Francisco may be unable to compete for new marina development with other Bay Area locations that offer more potential waterfront sites at lower land costs.

There is a consensus among the boating community that San Francisco should offer more opportunities for free or inexpensive temporary berthing or mooring. Thee are locations where such facilities may be desirable, for example, near waterfront restaurants and public attractions, and it is conceivable that commerical establishments could provided such facilities in order to benefit from improved boater access and general ambience. However, thee are potential cost issues associated with guest berthing, such as compliance with the American Disabilities Act and general liability exposure, that may impede provision of more low cost berthing and mooring facilities.

III. REGULATORY & ENVIRONMENTAL CONSTRAINTS

The regulatory and environmental issues that concern marinas include provision of ample public access opportunities, regulation of live-aboard and houseboat marinas, development of "on-site" parking facilities, and mitigation of possible environmental degradation to the Bay waters.

A. Regulatory Issues

1. Public Access Opportunities

Marinas are considered by regulatory agencies, such as the Bay Conservation and Development Commission (BCDC) as an acceptable water-related recreational use. In its review of marina projects, BCDC has placed great emphasis on the provision of public access as an integral part of the development. With proper siting and design, marinas are an excellent way of providing public access to the waterfront. Ways that public access have been accommodated include the construction of promenades and pathways along marina developments, and the provision of public restrooms, seating arrangements, lighted public areas, and trash containers. In addition, scenic overlooks at different elevations can provide ample opportunities for viewing the water as well as boating activities within the marina. The sailboat masts and landscaping treatment could serve as a visual relief and frame a variety of bay views. Other opportunities for increasing public access to the water include the development of a waterfront park adjacent to the marina, public launching ramps, transient dockage facilities, and fishing areas.

335, which would be developed in conjunction with the South Beach Park component of the marina development. However, implementation of this project is dependent on agreement over the relocation of the Port's Maintenance Facility, which currently operates out of Pier 46B.

Recent concerns over dredging and deteriorating water quality in the San Francisco Bay may negatively affect the feasibility of developing additional marinas in San Francisco. However, unlike some industrial and commercial / recreational water-dependent uses, marinas can be developed with minimal dredging and filling of the Bay if suitable waterfront sites are available. The provision of ample sewage pumpout facilities can also reduce the amount of water pollution associated with boating activities.

IV. FINANCIAL AND BUSINESS CONDITIONS

The recreational boating industry is a major contributor to numerous sectors of the economy. Nationally, $17 billion dollars was spent on boating related-products and services in 1988. These can include everything form new 150 foot luxury yachts, to rigging supplies for racing yachts, to carpentry services on small sailboats. In 1986, the boating industry in California generated $2.6 billion in boat manufacturing, sales, and boating-related services alone. For that same year, recreational boaters spent $1.6 billion on boating trip-related purchases such as gasoline, groceries, and lodging. Indirect benefits to the California economy include taxes (sales, fuel, income, property, lodging) as well as wages and salary for commercial industries supporting the boating industry.

A. Marina Development

Because the two marinas under Port jurisdiction were developed by third parties (Pier 39 Limited Partnership and San Francisco Redevelopment Agency), the Port's relationship with marina operators is indirect in nature. Attempts to assess the financial health of the two marinas under Port jurisdiction are difficult as they were planned and developed as part of larger commercial and/or residential developments. For instance, the Pier 39 Marina is operated as a component of the Pier 39 commercial development, which includes retail, restaurant, as well as ferry/excursion ferryboat uses. Similarly, the South Beach Harbor is part of the South Beach Marina development project, which includes mixed-income housing as well as proposed marina-related commercial development and a park. However, this component of the Redevelopment Plan was never completed, as Proposition H eliminated the possibility of hotel development on Pier 40, and the planned park would encroach into Pier 46B and Seawall Lot 335, which would necessitate relocation of the Port's Maintenance Facilities. Because the financial analysis had assumed certain levels of revenue from development on Pier 40, the South Beach Harbor Project was unable to generate sufficient revenues to repay the $20 million bond debt that the Agency accrued for the development; and as a result, the project had to be refinanced by the Redevelopment Agency in 1991.

Marinas are also compatible with a variety of recreational and commercial uses inland. Marinas are similar to parks in that marina activities usually conjure up a relaxing atmosphere without noise and other annoyances associated with an urbanized environment. As previously mentioned, marinas can also be aesthetically pleasing and serve as a focal point for the waterfront in addition to increasing public access opportunities. For these reasons, marinas are often developed within a park-like setting. San Francisco Municipal Marina is an integral component of the Marina Green park. As part of larger commercial developments, marinas can often improve the attractiveness of the waterfront location. For instance, Pier 39's array of shops and restaurants capitalize on the marina's location in offering a unique commercial recreational experience to visitors. The South Beach Harbor was developed as the centerpiece in attracting residential development in the South Beach Redevelopment Area.

B. Environmental Issues

Environmental considerations in the planning and operation of marinas include issues related to bay dredging, bay filling, and water quality. Under BCDC's purview, proposals for new marinas are reviewed for their effects on the Bay ecosystems. Even though marinas are considered an acceptable water-oriented use, BCDC's main concerns, in addition to the provision of public access, is the amount of filling and dredging activities that are required in marina developments. Bay filling reduces the amount of natural habitats for marine inhabitants and disturbs the ecological balance in the Bay, while dredging may release a variety of pollutants into the water contributing to habitat loss. Recent concern over suitable water disposal sites for dredged spoils may limit the amount of maintenance dredging activities for existing marinas as well as the feasibility of constructing new marinas by increasing the costs of spoil disposal in upland or remote ocean locations.

Perhaps the most significant environmental concern is the possible impacts on water quality due to increased waterfront activities associated with marinas. These include the runoff of petroleum products, copper-based paints, and heavy metals associated with recreational boats and adjacent developments, such as parking lots. Without proper sewage pumpout facilities, fecal contamination from untreated sewage discharges can degrade water quality in the Bay. Increased pollution of the Bay waters may negatively affect motorboating activities that rely on fishing as a primary source of recreation.

C. Implications for the Port of San Francisco

Unlike other Bay Area market marinas, which have ample land for parking facilities, the Pier 39 Marina and South Beach Harbor were constructed in existing urbanized areas that limit parking development. As a result, users of the Pier 39 Marina park in metered street spaces or in the Pier 39 Garage paying discounted parking rates. South Beach Harbor currently has less than 100 permit parking spaces, which is inadequate for the size of the marina. The Redevelopment Agency is currently proposing a 300 space surface parking lot on portions of Pier 46B and Seawall Lot

advantage allowing them to charge below-market rates, which also affects the health of any associated commercial developments associated with these marinas. In contrast, privately-financed marinas, such as the Pier 39 Marina, need to charge at or above market rates.

C. Implications for the Port of San Francisco

Because the Pier 39 Marina and South Beach Harbor are operated as components of larger development projects under master leases from the Port, it is difficult to determine the amount of revenue the Port actually receives for the marina operations. The Pier 39 Limited Partnership operates the Pier 39 Marina in conjunction with commercial development on the pier, while the Redevelopment Agency operates the South Beach Harbor in conjunction with the South Beach Marina Apartment development. The Port currently receives a minimum monthly rent of $42,000 from Pier 39 for the marina and commercial developments, and $9,200 from the Redevelopment Agency for the marina and parking areas. However, the long-term viability of South Beach Harbor is particularly important to the success of the Redevelopment Agency's other development projects in the area. In particular, development of Pier 40 and the South Beach Park may enable the Agency to improve the South Beach Project's ability to repay its debt. Due to high development costs, marina developments generally are not financially feasible unless they are tied into larger development projects. Both the Pier 39 Marina and the South Beach Harbor were constructed as amenities within larger residential and commercial developments. Even as a waterfront amenity, the berthing rates charged by these marinas are much higher than those charged in publicly-developed and subsidized marinas, such as the San Francisco Municipal Marina.

V. DESCRIPTION OF MARINA OPERATIONS & FACILITIES

A. Marinas

Small boat marinas are commercial enterprises that provide for the safe storage of recreational boats. This can be accomplished through wet storage in slips or moorings or dry storage in racks located inland. As there are very few facilities for dry rack storage in San Francisco (about 30 racks are available in the San Francisco Municipal Marina and the Presidio area), and because dry storage methods where up to 5 boats are stacked vertically in racks hinder public view access of the water, this component of marinas will not be discussed in detail.

Recreational boats include both sailboats and motorboats that are used primarily for recreational pursuits. Sailboats are comprised of yachts and smaller crafts that may have marine engines for auxiliary power, while motorboats are strictly powered by inboard or outboard marine engines. Recreational activities, such as swimming, sun tanning, and fishing, are pursued in both sailboats and motorboats. However, sailboats are primarily used for pleasure cruising and racing, while motorboats are used in conjunction with other water sports such as waterskiing and jet skiing and may be more conducive to fishing activities. Boats used

High capital costs and uncertain revenue streams (due to difficulties in forecasting berthing demand) make marina development highly risky without supporting commercial uses. Revenues received from berthing rentals alone may be insufficient to make new development feasible. For instance, the South Beach Harbor component of the South Beach Redevelopment projects was constructed in 1987 for $11.3 million. This included site demolition, dredging, a breakwater, a system of concrete floating docks, and a temporary harbormaster's office. The breakwater alone was estimated to cost $5.4 million in 1982. Similarly, the concrete breakwater constructed for the Pier 39 Marina in 1983 to replace an existing floating tire breakwater system had an estimated cost of $4.7 million.

Marinas may also benefit adjacent commercial development through increased use of temporary or short-term berthing accommodations. For instance, the Port of Oakland constructed 15 courtesy guest docks as part of common area improvements to the Jack London Waterfront development in the mid-1980's. Even with a four hour berthing limit, the docks are well-utilized by boating patrons to the development's restaurants. Similarly, the San Leandro Marina provides a separate set of berthing slips to be used overnight free of charge as an inducement to attract visitors to the commercial developments adjacent to the marina. Even though guest docks improve public access to waterfront developments, there are liability issues that may affect the cost-effectiveness of such ventures.

B. Equity Issues

Questions of public equity are also raised when examining publicly- or privately-developed marinas. For instance, the rate structures at the three marinas in San Francisco reflect the public and private nature of these developments. In 1991, Pier 39 and South Beach had the highest and third highest average berthing rates in the San Francisco Bay Area respectively, while the San Francisco Municipal Marina had one of the lowest average rates. Because the Municipal Marina was developed and financed in conjunction with a public park, it was able to charge relatively low rates for berthing, charging an average of $4.38 per berthing foot compared with an average of $4.78 for all other public marinas in the Bay Area. Even though South Beach is developed by the Redevelopment Agency, it is really operated as a private marina, such as Pier 39. For the same year, the average rate at South Beach was $7.48 per berthing foot, while that of Pier 39 was $8.33. These are significantly higher than the average rate for all privately-operated marinas, which was $5.05.

However, publicly-developed marinas, such as South Beach Harbor, often receive varying amounts of public subsidies. In the case of South Beach, the Redevelopment Agency received a $10.7 million loan from the California Department of Boating and Waterways (DBW). As long as state policy supports DBW's funding of public marinas, the practice raises issues of unfair competition between publicly- and privately-developed marina projects. Theoretically, this gives publicly-developed marinas an unfair

the Pier 39 Limited Partnership in conjunction with a commercial recreational complex under a master lease from the Port. About 285 of the 351 berths are privately-owned as dockominiums. The South Beach Harbor is a 700 berth marina constructed by the San Francisco Redevelopment Agency in 1987. Located between Piers 40 and 46B adjacent to China Basin, the marina is operated by the Redevelopment Agency under a 20 year lease from the Port. In addition, the Mission Rock Resort rents an area south of Pier 64 in the Central Waterfront on a month-to-month basis where it provides 25 berthing spaces. Located near the Presidio outside of the Port's jurisdiction, the San Francisco Parks and Recreation Department operates the San Francisco Municipal Marina which provides 750 berthing slips.

E. Implications for the Port of San Francisco

Because the three marinas on Port land are privately financed and operated, the Port does not have any direct responsibility for maintenance and upkeep of these facilities. Both the Pier 39 Marina and South Beach Harbor are considered new relative to other marinas in the Bay Area, and as such does not require significant operation and maintenance costs. From the Port's perspective, these marina developments are added amenities that complement the variety of waterfront activities through increased public access, visual relief, and water-related activities.

for commercial sport fishing are not included in this report, but are discussed along with the Fishing and Fish Processing Industries Profile dated March 18, 1992.

A marina usually consists of an arrangement of docks and ramps from which boats are secured. This is accomplished by securing the boats in individual slips within the marina or at mooring facilities off-shore. In addition, there is usually a breakwater system constructed at the periphery of the marina to protect the boats from wave and wake action. A marina would also contain such basic facilities as a harbormaster's office, restrooms, showers, storage lockers, and ice freezers. Infrastructure systems that service marinas include potable water, electricity, telephone, fire protection, and trash collection. On-site facilities for sewage and waste oil disposal are also present. Because marinas serve as an interface between water- and land-side boating activities, other supporting facilities found in marinas include launching ramps and boat hoists for the launching and removal of boats. Because many recreational boaters drive to marinas, accommodations for parking are usually found nearby. Apart from these basic characteristics, marinas can vary in size, configuration, ownership type, as well as locational contexts.

B. Ancillary Facilities

Types of supporting facilities that are usually located near marinas include marine chandleries, which are stores that provide basic boating supplies and equipment, and bait and tackle shops that provide supplies for fishing activities. These could include everything from kerosene to rigging equipment to navigation electronics. Fuel for self-propelled boats are provided at marine fuel docks or within marinas. Similar to automobiles, recreational boats require regular maintenance and repair. These services are provided by boatyards located in the marina or in an off-site location. An in-depth discussion of these supporting uses can be found in a separate report on Supporting Services for Commercial and Recreational Industries.

C. Ownership Types

Whether they are privately or publicly owned, marinas are operated under a variety of arrangements. Berthing spaces could be rented on an hourly, daily, weekly, or monthly basis, or they could be rented under annual leases. Berthing spaces could also be sold to individuals or groups through cooperatives or condominiums (dockominiums). Under a dockominium arrangement, private parties own the rights to individual berthing slips, while a dockominium association owns and upkeeps all of the common areas between slips (piers, docks, piles, etc.). Cooperatives are similar to dockominiums except that individuals buy shares in a common association, which owns, operates, and maintains the marina.

D. Port of San Francisco Marinas

Three marinas are located within the Port's jurisdiction. Located near Fisherman's Wharf, the Pier 39 Marina is operated by

VII. QUESTIONS FOR MARINA REPRESENTATIVES

1. Are there any foreseeable developments or trends in recreational boating that might necessitate the construction of additional marinas in the Bay Area? (e.g. aging baby-boomers, new technologies, windsurfing, etc.)

2. Are there proposals for new marinas and/or expansion plans to existing marinas in the Bay Area that may negatively affect existing marinas in San Francisco?

3. Is there sufficient demand in the near future for smaller berthing slips (less than 26 feet) to justify additional marinas or expansion efforts in existing San Francisco marinas that target these smaller vessels?

4. Is there sufficient demand from boats currently dry-berthed or stored on trailers to justify the construction of additional launching ramps in San Francisco in the future, assuming the existing ramp south of Pier 64 is repaired and properly maintained in the future?

4. Are there any competitive advantages of locating additional marinas in San Francisco?

5. To what extent will maintenance dredging and water pollution concerns affect the viability of existing and future marina developments?

6. Assuming the use of shared parking facilities (such as between marinas and adjacent commercial developments), is the current standard of 1 space per 2 marina berths adequate?

7. Are there ways that San Francisco can capitalize on its role as a destination attraction for Bay Area visitors? For example, should short-term guest docks be developed in conjunction with other waterfront commercial and improvement developments?

8. How can the Port address financial and legal liability factors that hinder provision of short-term guest docks?

9. What are the prospects of single-purpose marina developments without supporting commercial components? To what degree are marina developments self-amortizing?

VI. CONCLUSION

With respect to small boat marinas, the Port recognizes that:

* Current trends in recreational boating, berthing demand, boat sales, and increasing costs indicate that the market for additional small boat marinas in the Bay Area is currently limited.

* Even though the existing supply of berthing facilities in the Bay Area is sufficient to accommodate total berthing demand in the near future, there is a shortage of berthing facilities for smaller boats (less than 26 feet) in San Francisco.

* Even if demand for additional berthing space increases significantly, San Francisco may be unable to compete for new marina development with other Bay Area cities that may offer more potential waterfront sites at lower land costs.

* Nevertheless, San Francisco has a particular niche in the Bay Area recreational boating market and could maintain its market share of berthing facilities for recreational sailing as well as temporary or short-term berthing that capitalizes on the city's role as a destination attraction offering a variety of cultural, recreational, and commercial activities.

* Revenues solely from berthing rentals may not be adequate to recover the high capital costs of construction associated with marina development without some combination of supporting commercial developments and public subsidies.

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PROFILE OF BOAT CLUBS, BOAT YARDS AND SMALL BOAT SERVICES

I. INTRODUCTION:

This profile of the Boat Clubs, Boat Yards and Small Boat Services located on Port of San Francisco property contains the following components:

An assessment of current and future demand for facilities and services for small boat owners in San Francisco is provided, including a discussion of the implications for the Port of San Francisco.

Regulatory issues and environmental implications associated with the operation and development of facilities and services for the recreational boating community are discussed, such as compliance with Bay Conservation and Development Commission policies, opportunities for public access and environmental concerns regarding the potential impact of those uses on water quality.

Financial and economic issues are discussed to the extent pertinent to Port of San Francisco decisionmaking.

Existing small boat clubs, boat yards and boat service facilities located on Port property are identified, and desirable or necessary improvements to those facilities are discussed.

The issues associated with the operation and development of the boat clubs, boat yards and small boat service facilities that are relevant to the land use planning process are summarized. In addition, a list of questions that the Advisory Board members may want to pose to representatives of the boating community is attached.

II. Growth Trends

A. Boat Clubs

No formal studies of the potential growth in membership of San Francisco's boat clubs are available. In interviews with the officers of the two Boat Clubs located on Port property the consensus was that the existing clubs could accommodate any foreseeable increase in demand for club membership. The Mariposa and Hunters Point Yacht Club, located on China Basin Street near Pier 48-50 has a membership of 150, and is currently engaged in a membership recruiting drive. The Bay View Boat Club, also located on China Basin Street next to the public boat launch, has a membership of 440. There are also other boat clubs located elsewhere on the San Francisco Waterfront, notably the San Francisco Yacht Club and the Golden Gate Yacht Club located in the Marina District. This assessment of growth potential for boat club membership is supported by a review of statistics showing a steady decline in the number of registered boats owned by San Francisco residents.

Although non-residents are eligible for membership in both clubs, and may be attracted to the boat clubs due to their proximity to the public launch, or in the case of the Mariposa and Hunters Point Yacht Club access to their private boat ramp, there are no indication that the demand for club membership by non-residents will exceed the capacity of the boat clubs.

B. Guest Berthing and Launch Facilities

Although the existing boat clubs may be sufficient to accommodate demand for club membership by the local boating community, the leadership of the clubs identified a need for improved dock and launch facilities for day users. A consistent theme sounded by representatives of the boating community was that there are inadequate facilities in San Francisco for temporary or guest berthing. While, again, no formal survey is available that measures the potential demand for day use berthing facilities, it has been observed that other communities, notably Sausalito, Tiburon and Oakland/Alameda provide a much greater number of free temporary berths, at local restaurants and marinas, than are available in San Francisco.

Boaters from other areas that want to dock in San Francisco for the day have the following facilities available:

	Location	Number of Berths	Charge
1.	Pier 39		$10 for 4 hours $30-45 overnight
2.	South Beach Marina		Varies by size Average $10 per day

	Location	Number of Berths	Charge
3.	Bay View Boat Club	5	Free to members, and visitors with reciprocal privileges from other clubs.
4.	Mariposa & Hunters Point	4	Free to members, and visitors with reciprocal privileges from other clubs.
5.	Mission Rock Resort	3-5	Free
6.	St Francis Marine Center (SF Boatworks and The Ramp Restaurant)	3-5	Free

Representatives of the Mission Rock Boat Owners Association commented that moorings were once available along the Embarcadero south of the Ferry Building but were removed several years ago.

In addition to the lack of temporary berthing facilities, representatives of the boating community identified a present need for additional and improved launch facilities for small boats, particularly for free public ramps. There is currently only one such facility in San Francisco, on China Basin Street adjacent to the Bay View Boat Club. That facility is under the control of the Recreation and Parks Department. The ramp dock recently broke away during a storm, therefore the facility is not currently operational.

Individuals familiar with the public ramp expressed concern about the adequacy of the facility to accommodate current demand. In the summer months there are reported to be as many as twenty to thirty boats on trailers waiting on China Basin Street to gain access to the Bay. With the current design, only one boat can be launched at a time. In addition, there is a lack of off-street space to accommodate boat-trailer parking on China Basin Street, a problem that is expected to become critical when the Mission Bay development leads to a narrowing of China Basin Street to a 40 feet width.

The Mariposa & Hunters Point Yacht Club provides a private boat ramp for members. For larger boats, the SF Boat Works provides two 40 ton travel lifts for haul out and launch of boats to be worked on at their boat repair facility. The operator of this facility expressed the desire to one day provide facilities to accommodate larger fishing vessels and coast guard boats for haul out and repair services.

C. Boat Yards - Repair and Storage

There are a few boat yards, boat repair and storage facilities located on Port property along the southern waterfront between China Basin Channel and Pier 70. These facilities include:

1. Royal Charter Marine Sub Tenants
   559 China Basin Street
   Provides historic, and wooden boat repairs, crafting of marine equipment, constructing floats and dock facilities, some boat storage, and boat building.

2. B & I Boats
   Pier 64-N China Basin
   Provides small boat repair, boat building and storage.

3. St. Francis Marine Center (SF Boat Works)
   835 China Basin Street
   Provides boat repair, temporary repair related storage, launching, party boats, marine related retail and service business as well as a restaurant and bar.

4. John Ciddio - Pier 66 Boar Yard
   Provides boat, engine and sail repair, related storage, launching, boat sales and related retail and storage.

A common complaint from the boating community was the lack of dry storage facilities along the waterfront. Although trailerable boats represent the greatest segment of the market, due to the small lot sizes in San Francisco, few people can store boats on their own property. Therefore, it is assumed that if storage facilities were provided at reasonable cost ($100 per month) that there would be considerable demand for storage spaces. In addition, owners of large boats would prefer dry storage during winter months. Storage areas for larger sail boats must be located on the waterfront because of the difficulty of transporting sail boats with large masts.

D. Implications for San Francisco

As discussed in the profile report on small boat marinas, there appears to be a steady decline in the number of small boats registered to San Francisco residents. Although there may be growth in the number of small boat owners in San Francisco in the future, at present the focus of the boating community appears to be on provision of facilities to meet current demand, particularly public launch facilities, short-term berthing and mooring and dry storage space. The challenge for the Port is to identify locations to accommodate the desired facilities, and the financial resources to provide the facilities at the price that boaters can and will pay.

With respect to the adequacy of boat launch facilities the critical issues at present is the repair of the public ramp on

China Basin Street. The facility is under the control of the Recreation and Parks Department, and it remains to be seen whether the Department will have the resources to repair the facility given the current budget situation. Over the long term, the Port will have to address issues associated with a potential conflict between the Mission Bay development plans for China Basin Street, and the need for adequate space for launching at the public ramps, as well as parking for boat trailers. The Mission Bay Development Agrement provides for a design process to address those issues at the time the adjacent land on the opposite side of China Basin Street is ready to be developed for park use.

The boating community also identified the lack of inexpensive, or free, short term berthing and mooring facilities along the San Francisco waterfront as an issue. While Pier 39 and South Beach Marina each accommodate twenty to thirty boats requiring short term berthing every week, San Francisco offers minimal accommodation for free access by water borne visitors to local restaurants and public attractions such as is provided in other localities on the Bay. The challenge for the Port is to identify suitable locations and the financial resources to offer such facilities. While it may be possible to encourage commercial establishments to undertake development of these facilities to increase patronage, and improve the marine ambience at a given location, there are some potential obstacles. For example, if recent amendments to the American Disabilities Act apply to such facilities, the cost of providing appropriate access from the docks may be high. In addition, there is increased liability associated with providing access from the water that could also increase the costs associated with temporary berthing facilities.

Representatives of the boating community also identified a need for increased provision of facilities for dry storage for both smaller, trailerable boats, as well as larger sail boats. The Port must address both location and financial issues in order to assess the feasibility of accommodating demand for dry storage. Although motor boats and trailerable boats could be stored at some distance from the waterfront, larger sail boats must be stored on the waterfront because the large mast can not be easily moved over streets, particularly where overhead power lines are present. With respect to cost issues, although boat owners will pay approximately $100 per month for an 8' X 25' space, competition for waterfront land may make such a use financially infeasible.

II. Regulatory and Environmental Issues

The principal regulatory and environmental issues associated with boat clubs, boat yards and short-term berthing and launch facilities include: 1) Compliance with Bay Conservation and Development Commission (BCDC) policies, 2) Opportunities for public access and 3) Water quality issues.

A. Regulatory Issues:

1. BCDC Policies -

The Boat Clubs and Boat Yards located on port property are located on the Southern waterfront in an area currently designated for marine terminal expansion in the BCDC Seaport Plan. Although recent amendments to the Seaport Plan have set forth the terms by which that designation can be changed, essentially requiring the Port to establish the viability of providing equivalent marine terminal capacity and backlands in the Pier 70-80 area, those conditions have not yet been satisfied. Until that issue is addressed, the facilities in the area must be treated as interim uses.

Assuming that the near-term marine terminal designation is removed from the area between Pier 48-50 and Pier 70, there are still issues of compliance with BCDC policies associated with uses such as dry storage. In order to increase dry storage uses it would have to be demonstrated that such a use required water access. This issue has arisen at other marinas around the Bay.

2. Public Access Opportunities

Both BCDC and the Port are committed to increasing opportunities for public access along the Bay. Facilities for small boats generally involve operations that are more compatible with provision of public access than are industrial waterfront activities such as container terminals. Any plans for future improvement or development of small boat facilities along the waterfront must provide for maximum feasible public access.

3. Environmental Issues

The principal environmental issue associated with small boat facilities is the impact of such uses on water quality in the Bay. The increase in recreational boating in general throughout the Bay Area has raised concerns about the water quality impacts associated with boat fueling, sanitary waste disposal, and chemicals used in bottom paints. In addition, boat repair uses present potential issues concerning stormwater run-off into the Bay. These issues must be carefully considered, and appropriately mitigated in any future development of facilities along the San Francisco waterfront. Recent regulations imposed on stormwater run off should provide the impretus for addressing water quality impacts. The Waterfront Plan EIR will address potential water quality impacts from these uses.

III. Financial and Economic Issues

The boat club, boat yard and launch facilities located on Port property yield a small amount of revenue and generate a minor amount of direct employment relative to other uses on the waterfront. However, the waterfront areas that these uses occupy are small in size, and underimproved, and thus are not well suited to most other water-dependent uses that typically require a much large land area and substantial improvements.

The principal value of these uses is that they facilitate and enhance recreational boating opportunities in San Francisco. In addition, combined with commercial recreation activities, such as restaurants, these uses provide a marine ambience that

contributes to the commercial success of those enterprises.

Monthly rent payments for the boat clubs, boat yards and related marine services are shown below:

Mariposa and Hunters point Yacht Club	
2,683 sq. ft.	$439.85 Minimum Rent
Bay View Boat Club	
3,150 sq. ft.	$315.00 Minimum Rent
Royal Charter Marine Subtenants - Boat Repair and Building, Marine Services	
3,000 sq. ft. Building 16,000 sq. ft. Yard Area	$2,288.90 Minimum Rent
B & I Boats - Boat Repair, Building & Marine Services	
2,254 sq. ft. Building 5,864 sq. ft. Yard	$1,037.00 Minimum Rent
Mission Rock Resort	Ranges from Minimum Rent of
30,680 sq. ft. total building and docks	$644.50 to $3,000 depending on percentage of sales.
St. Francis Marine Center	
151,447 sq. ft. Total building and boat yard	Minimum Rent is $12,555.00 but with percentage of sales, actual monthly payment is higher.
Pier 66 Boat Yard	
35,763 sq. ft.	Minimum Rent is $3001.00 or set percentage of sales, whichever is higher.

In reviewing Port revenue from these uses, it should be noted that the relevant lease terms often provide for the tenant to make improvements to the facilities that increase the long term value of the property for the Port. In addition, many of these tenancies are on a month-to-month basis, and that situation depresses the business development capabilities of the tenants by limiting their access to long term financing.

Implications for the Port of San Francisco

Assuming that the Seaport Plan designation of the area where these facilities are located is changed from the current marine terminal designation, the Port will be in a position to evaluate these tenancies on a long term basis. However, it would not be reasonable to expect a marked increase in revenue from these types of uses because there is little growth prospect, and limitations on the amount that the small boat community can bear.

The improvements identified as necessary or desirable by the small boat community are low cost, relative to the requirements of other water-dependent industries. The principal financial issue that the Port must address is that of "lost opportunity" costs associated with devoting scarce waterfront land to relatively low-value uses. Of course, the true value of these uses can not be measured in financial terms alone in that they provide important opportunities for water recreation, and further the Port's public trust obligations to provide for commerce, navigation and fisheries.

IV. Existing Facilities and Operations

A. Boat Clubs

The Mariposa and Hunters Point Yacht Club, located near Piers 48-50 on China Basin Street has been in existence since 1932. The Club provides public launch facilities and, during fair weather months, docks for its membership. Membership fees are low, $150 to join with $50 yearly dues. An individual need not be a boat owner to join. In addition to the marina facilities, club membership offers educational and recreational opportunities for boaters, including events coordinated with other boat clubs throughout the region. The Club also makes its facilities available for meetings of other non-profit organizations throughout the City.

The Bay View Boat Club, located on China Basin Street adjacent to the public boat launch ramp, has been in existence for over thirty years. The club provides dock facilities to its membership in fair weather months, with small boat launching available on the public ramp. Club members number over 400, and the fees are the lowest in San Francisco at $100 initiation, and $50 annual dues. The Club sponsors a number of events for the boating community, including "Sail Ins" from other yacht clubs, and regular racing events. In addition, the Club provides educational classes and recreational events for its membership, as well as making its facilities available for non-profit organizations or other worthy causes.

Boat club members agreed that additional dock facilities, possibly along the waterfront between the two clubs would be a desirable improvement.

B. Boat Yards, Repair, Storage, Building and Launch

There are four facilities along the Southern Waterfront that provide various combinations of marine services including boat repair, boat building, boat storage, launch and haul out facilities, boat sales and brokerage, fueling and miscellaneous services.

The largest operation among the small boat facilities on Port property is the Saint Francis Marine Center (SF Boatworks). This facility offers two 40 ton mechanical travel lifts for haul out. Boat repairs constitute the principal service at this facility, although related marine services are also provided at this location. There is also a small marina, as well as a popular restaurant and bar, known as The Ramp.

The Pier 66 Boat Yard operated by John Ciddio is located adjacent to The Ramp and next to the Pier 70 ship repair yard. This facility also provides boat repair and storage services, as well as a launch for small boats.

further north along the waterfront there are two smaller boat service facilities B & I Boat, operated by Ed Bingham provides bot repair and storage facilities at Pier 64-N. There are also small boat services offered on the adjacent property, held under a lease to Royal Charter Marine. There Larry Hitchcock provides boat repair and building services on wooden boats, including work on the historic boats for the National Maritime Museum. Gary Wheeler, another subtenant, provides marine related services such as float construction.

Operators of these small boat facilities identified a need for additional haul out facilities, particularly for larger boats. There was also consensus that there was un-met demand for dry storage facilities along the southern waterfront. In addition, improvements are needed at the free public launch, and boaters also identified a lack of temporary, inexpensive, berthing facilities.

C. Implications For The Port of San Francisco

The boat clubs and boat yards along the southern waterfront provide important services to the recreational boating community in San Francisco.

While the potential capital improvements required by the small boating community are minor relative to the needs of the container industry, for example, the revenue potential to the Port is also insubstantial. Some of the desired facility improvements could be provided by commercial operations. SF Boatworks identified a long term plan to improve facilities to permit larger fishing and Coast Guard vessels to be repaired at that facility. In addition, the boat clubs may over the long term be in a position to provide more temporary berthing facilities for visiting boat owners. Other facilities, such as dry storage, require further analysis as to the financial feasibility and desirability of developing such a facility on Port property.

VI. CONCLUSIONS:

The Port provides land for a variety of facilities that serve the recreational boating community in San Francisco. Most of these facilities are located along the southern waterfront between Piers 48-50 and Pier 70. The range of uses accommodated in this area include, in addition to the small boat marinas discussed in a separate profile report, two boat clubs and related temporary berthing facilities, and several facilities that provide various types of boat repair services, some boat storage, and boat chandlery services.

Based on the modest, but steady decline in the number of boats registered to San Francisco residents an assumption was made that there would not be a marked increase in demand for small boat facilities in San Francisco. Rather, representatives of the boating community emphasized a need for improvements to serve the existing recreational boaters as opposed to development to accommodate anticipated increases in demand for facilities.

The general consensus was that additional temporary berthing facilities should be provided along the waterfront near restaurants and public attractions for casual use of recreational boaters, similar to that provided in other communities around the Bay. This idea requires further study to determine the financial feasibility of providing such facilities, possible through arrangements with existing commercial tenants that may benefit from that type of amenity.

The lack of dry storage was also identified as a land use issue that should be examined in the planning process. There are very few opportunities for dry storage of boats along the San Francisco waterfront, and with the exception of the hoist provided to members of the Saint Francis Yacht Club, there is no place where large boats can be stored on land with ready access to the Bay. With respect to trailerable boats, there is only one public ramp for launching in San Francisco, and that facility is at least temporarily out of service.

There are a number of regulatory and environmental issues associated with the operation and development of small boat facilities. The area where most of these facilities are located is currently designated as a near term marine terminal development area, and thus the existing small boat uses have been considered interim uses. With the impetus of the Mission Bay project, the BCDC amended the Seaport Plan to provide for a possible modification of that marine terminal designation, assuming certain conditions are satisfied. This pending Seaport Plan change now gives the Port the opportunity to undertake a long term plan for

this area which accommodates most of the small boat facilities along the waterfront. Planning for facilities for recreational boating must incorporate opportunities for public access to the maximum extent feasible as such uses are compatible and reinforcing uses.

The principal environmental issue to be considered in any plan for facilities for recreational boaters is the impact of those uses on water quality. As a result of the recently adopted stormwater runoff regulations, the Port should obtain better information about the potential water quality impacts associated with landside operations of these facilities. There are also issues related to chemicals in bottom paint on recreational boats, as well as possible water contamination from fuel and sanitary waste that have been identified in connection with recreational boating. These issues will be addressed in the Waterfront Plan EIR.

The direct financial and economic impacts associated with these small boat facilities are small relative to other waterfront uses. The principal value of these uses is in the recreational opportunities that are made available to San Francisco residents. These uses also further the public trust under which the Port holds title to this land in that they foster commerce, navigation and fisheries.

The small boat facilities and services identified here are operated either on an essentially non-profit basis, as in the case of the boat clubs, or are small privately owned business enterprises. There is some possibility that facility improvements can be privately funded, or subsidized in conjunction with commercial recreational enterprises. Improvements to the boat clubs could potentially be funded through the membership or possibly grant funding. Most of the facilities are on a month to month lease which impedes internal funding for facility improvements. That situation may change once a long term land use plan for this area and the small boat facilities is completed.

VII> DISCUSSION ISSUES:

There are a number of issues that the Advisory Board should consider in the decision-making process with respect to land allocations for the small boat facilities.

1. Is it reasonable to assume that current trends, showing a decline in boat ownership among San Francisco residents will continue?

2. Assuming that there is consensus that the land use planning effort should focus on addressing the needs of the existing boating community, should the Port encourage temporary berthing, dry storage facilities and public launch improvements on its property? If so, where, and how might those facilities be financed?

3. What opportunities are there for improving public access in the vicinity of the small boat facilities?

4. What issues might arise in terms of compatability between the small boat facilities along the southern waterfront and the pending Mission Bay development?

PROPOSED QUESTIONS FOR REPRESENTATIVES OF THE BOATING COMMUNITY

1. Do you agree with the assessment that demand for boating facilities by San Francisco residents will not increase in the forseeable future?

2. What facilities and improvements are necessary and desirable to serve the small boat community?

3. What do you see as the role of the Port in the provision and development of improvements or new facilities to serve recreational boaters?

4. Can the facilties and improvements considered necessary and desirable be commercially viable, or is some subsidy required?

5. What issues do you see arising for the existing small boat facilities once the Mission Bay project is developed across China Basin Street?

6. What opportunities do you see for improving public access in the vicinity of the small boat facilities?

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PORT OF SAN FRANCISCO
SAN FRANCISCO PORT COMMISSION
WATERFRONT PLAN ADVISORY BOARD

STATEMENT OF FACTS AND ISSUES AS TO THE LAND USE REQUIREMENT OF THE SHIP REPAIR INDUSTRY

(Revised 8/28/92)

The following material provides a brief statement of the facts and issues relating the land use requirement of the Ship Repair Industry, as identified in the profile report and in a workshop with industry representatives:

I. FACTS AND ISSUES RELATED TO THE ADEQUACY OF CURRENT LAND AND FACILITIES TO MEET FUTURE INDUSTRY NEEDS:

- The Ship Repair industry has experienced a major downturn in its operations with a decline in the work force from a high of 20,000 workers working at 15 different locations along the waterfront in the 1960's to a current level of 500 workers operating out of two remaining facilities along the waterfront. (Southwest Marine which operates out of Pier 70 and Service Engineering Company, SECO, which operates out of Pier 50). The major reasons for the downturn in the industry have to do mostly with factors that are beyond the control of the Port of San Francisco. These include:

  1. The elimination of federal subsidies for the U.S. industry while foreign governments have continued their subsidies.

  2. The decline in private repair work being done on military ships.

  Given the current market trends for this industry there is more than an adequate amount of land currently being dedicated along the San Francisco waterfront for use by the Ship Repair industry.

- There is over one million square feet of surplus land at Pier 70 that Southwest Marine operates under a license agreement with the Port which is not needed for their ship repair operations. Given current market trends, if this land becomes available it should be dedicated for uses other than Ship Repair.

- The major land use issue that is subject to Port control is the lack of access to a drydock for Ship Repair companies other than Southwest Marine. SECO claims that this lack of access prevents them, and other smaller companies, from being competitive in the Ship Repair industry. Access to a drydock will be a major factor in determining whether or not more than one company will maintain a permanent facility along the waterfront.

- Other land use issues for this industry include the long term compatibility of Ship Repair operations at Pier 50 once the Mission Bay development project is underway, and access by smaller companies to piers that will allow them to work on ships on an as needed basis.

- Although not within Port jurisdiction, the Hunters Point Navy Yard may represent an opportunity for access to a drydock. The shipyard currently contains a major drydock that has been used for a number of years by the Navy for ship repair work. If this drydock is put into use by a private Ship Repair company, consideration might also be given to relocating all of the operations of that company to the shipyard.(It should be noted that operation and maintenance of this drydock and the potential need to maintain the existing rail access could be very expensive. Given the trends in the industry which remain outside of the Port's control it is questionable as to whether or not sufficient demand exists for this facility. As indicated above, the Port's two major ship repair companies disagree over whether there is sufficient demand to justify operation of a second drydock, in addition to the one operated by Southwest Marine.)

II. IMPLICATIONS OF REGULATORY AND ENVIRONMENTAL ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The major regulatory issue facing the ship repair industry, similar to other maritime industries, is the issue of dredging. The total amount of dredging that is required to maintain current operations at both Piers 50 and 70 is estimated at 125,000 cubic yards per year. Under terms of their current lease agreements, both companies are responsible for performing their own dredging. The seven point plan passed by the Board of Supervisors (mentioned in Point III) passes on this responsibility to the Port. An additional environmental concern is the possible adverse impact on water quality caused by ship repair activity that does not meet adopted water quality standards.

III IMPLICATIONS OF FINANCIAL AND ECONOMIC ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- In order to be more competitive in attracting ship repair customers, the Board of Supervisors passed a seven point program earlier this year which calls for the Port and City to make a number of concessions to support the industry. In addition to asking the Port to perform maintenance dredging work around ship repair facilities, the Board of Supervisors seven point plan also recommends to the Port that they waive most of the dockage fees and provide rent credits to the companies for capital work that they perform on their facilities. The Port has recently entered into negotiations with the Ship Repair companies to amend the current leases so that they will reflect the changes recommended in the program. The Port currently receives payments of around $2 million per year from ship repair companies. It is anticipated that once these negotiations have been completed this figure will be reduced. In addition to waiving most dockage and rent, the seven point plan also directs the Port to dedicate a currently vacant building at Pier 70 towards use by the industry for training. (The Port has already complied with this point.)

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INTRODUCTION

THIS PROFILE OF THE SHIP REPAIR INDUSTRY INCLUDES THE FOLLOWING COMPONENTS:

* An overview of the ship repair industry and general market trends are presented. This includes a discussion of the factors that may affect those trends, and the implications for the Port of San Francisco

* Regulatory issues and environmental implications that have hindered growth in this industry including the issues of dredging as well as a range of environmental issues that are considered in relation to the actual location of a facility.

* Financial and economic issues are discussed to the extent that they are pertinent to decisions being made by the Port of San Francisco and by the City and County of San Francisco.

* The existing ship repair facilities at Piers 50 and Pier 70 are described, as well as other opportunities that may exist for relocation certain facilities. The suitability and sufficiency of these facilities to support current usage and future anticipated usage is discussed.

* The issues associated with the ship repair industry that must be addressed as part of the land use planning effort will be summarized. In addition a list of questions that the Advisory Board members may want to pose to industry representatives is attached.

II. GENERAL MARKET TRENDS FOR THE SHIP REPAIR INDUSTRY

The ship repair industry has long been an important source of blue collar employment in the San Francisco Bay Area. In addition to providing high paying jobs and contributing tax revenues, the ship repair industry has historic ties to the San Francisco waterfront and maritime industries.

A. Overview of the Industry

The ship repair industry is divided into four seperate components:

"Full Service maintenance and repair of vessels"

The only existing full service facility currently in operation in San Francisco is the one operated by Southwest Marine at Pier 70. Full service operations provide topside and bottomside repairs including structural, mechanical and electrical systems repairs. A full service operation requires a drydock facility, and provides skilled services such as welding, painting, and machine shops. These facilities generally also provide warehousing space.

"Topside Only Operations"

Service Engineering Company (SECO) which does not currently own or operate a drydock, and operates out of Pier 50, is only capable of providing topside repairs. SECO cannot do hull work at its Pier 50 facility.

. "Bicycle shops"

These are businesses that perform smaller scale ship repairs, but do not maintain a permanent operation at a Port facility. Most often these companies will go to where a ship is berthed to unload cargo or load or unload passengers in order to perform dockside maintenance or repair work. These companies will lease dockside Port space only if required to perform an individual job. General Engineering, Triple AAA Shipyard in the East Bay, Danco and J & H are the "bicycle shops" that operate along the San Francisco waterfront. (J&H does operates out of Seawall Lott 333.

"Support Services"

These are the industries that the ship repair industry relies on to provide support services. Some examples of these are:

Boiler repairs, tank cleaning, crane rental and rigging, diesel engine service, diving services, electric motor servicing, navigation and radio servicing, fuel and lubricant suppliers, bar pilots, pipe fabrication, propeller repair, refrigeration service, ship chandler,

steel fabricators, turbine service, warehousing, electrical equipment electronic and instrumentation services.

Many of the larger repair firms will perform much of this work in their own shops. Many of the smaller operations can contract out up to 50% of their workload.

B. General Market Trends

For purposes of the general market trends section of this report we will focus on full service and topside only ship repair services.

In the 1960's the ship repair industry employed over 20,000 workers at over 15 different companies in San Francisco. The employment base of the industry now stands at approximately 450 full time position with a maximum of another 1,000 "seasonal workers" serving the industry in San Francisco. Most of these workers are employed by the two remaining ship repair companies: Southwest Marine and Service Engineering Corporation.

The trends in the ship repair industry locally have generally paralleled the national trends for this industry. Two of the major reasons that are most often given for the decline of the industry are:

1. The elimination of federal government subsidies in 1981, in contrast to the continuation of subsidies by foreign governments for their ship repair work.

2. General decline in private repair work on military ships because of the decline in the number of active military ships, as well as a shift to have the work done by government shipyards.

Other reasons that are cited by ship repair companies for the drop in ship repair orders is the failure to enforce provisions of the Jones Act that dictate that repairs on U.S. flagged ships must occur in U.S. facilities, the historically unpredictable relations between management and labor, and the regulations that U.S. shipyards, and often not foreign yards, are required to comply with.

Foreign competition:

During the 1960's the U.S. ship repair industry grew dramatically as the result of repairs necessary on both military and commercial vessels. Much of this work was directly attributable to the Vietnam War. After the war, in order to keep a level of combat readiness to build and repair ships, the U.S. government provided subsidies to companies in the United States. These subsidies were reduced and eventually eliminated in 1981.

Most foreign countries have not followed suit, and continue to maintain a level of subsidy to their shipbuilding and ship repair industries. These subsidies

include direct grants, preferential financing, equity infusions, research and development assistance, restructuring aid, special tax forgiveness and other measures which place U.S. shipbuilding and repair industry at a considerable disadvantage. Table 1 illustrates the different types of subsidies given by foreign countries to support their ship repair and ship building industries.

The elimination of subsidies by the U.S. government has put U.S. ship building and repair operations at a considerable disadvantage in the commercial market. Evidence of this fact is the elimination of some 52,000 jobs nationwide since the late 1970's. Most of these jobs and the work associated with these jobs have gone to foreign competitors. Private, commercial shipbuilding operations have perhaps been impacted the greatest Today there are only three commercial ships under construction in U.S. facilities. In comparison, before the end of subsidies in 1981 there were 60 ships on order or under construction.

Military spending

With the decline of the commercial ship repair industry in the United States in the late 1970's and early 1980's ship repair yards were forced to rely on the only market that remained for them, military contracts. The navy was of course the largest source of these orders. Additionally the other sources of contracts were Military Sealift Command vessels, the Coast Guard and the ready reserve fleet.

The recent downsizing of the military has led to a dramatic reduction in expenditures for ship repair work. The total Navy repair budget was reduced in 1991 from $3.5 billion to $2.6 billion. Out of this new figure, just over $1 billion was designated for work at private shipyards. Federal defense spending cutbacks are expected to continue and work on military vessels is expected to continue to follow its recent path of dramatic decline.

Current situation

With the decrease in military contracts, ship repair companies are once again being forced to market their services to commercial shipping companies. While some U.S. ship repair companies are starting to have success in marketing their services, the issue of foreign subsidies is once again becoming a major factor. It is first important to understand the decision-making process that owners go through to determine where to berth their vessels.

The commercial market for ship repairs is a world market in which companies representing entirely different economic environments are competing with one another for repair and maintenance work. Ships, being highly mobile, can be repaired at any number of places along their normal

routes. The following factors are considered the most important by owners when making a decision of where to repair their ships:

* Cost to the owner
* Reputation for quality
* Turnaround time
* Knowledge of ship
* Placement along the route
* Special skills that may be important.

The current situation for the west coast ship repair industry indicates a growing amount of private commercial work. 1991 industry estimates for the west coast found that all west coast private operations totalled approximately $1.4 billion.

Federal Legislation

Now that the U.S. ship repair industry has once again become more dependent on the commercial ship repair market industry representatives are forcing a decision on subsidies being provided by foreign governments to ship repair and ship building companies in their countries.

The U.S. Congress is currently considering HR 2056, the Shipbuilding and Repair Industry Free Trade Act of 1991. The bill seeks to eliminate foreign subsidies by requiring a foreign shipyard to repay to its government any subsidy received for the construction or repair of a ship. If a shipyard were to fail to repay the subsidy to its own government, a penalty in the amount of the subsidy would be levied on the ship before it could enter a U.S. Port. HR 2056 has been voted out of the House Maritime Committee and is scheduled to be heard on the floor of the house this year.

In June 1989 the U.S. Shiprepair and building industry filed a Section 301 trade petition targeting the subsidy practices of Japan, South Korea, West Germany and Norway. The industry withdrew its petition after the U.S. Trade representative asked to have time to negotiate an agreement with these countries. The talks have now broken off and the legislation described above is intended to penalize countries that have current subsidies in place.

TABLE 1

EXAMPLES OF SHIPBUILDING SUBSIDES

COUNTRY	SHIP REPAIR FAVORABLE FINANCING	SHIP PRODUCTION SUBSIDES	INVESTMENT AIDS	TAX BENEFITS	R&D FUNDING
Japan	Yes	Unknown	Yes	Yes	Yes
S. Korea	Yes	Unknown	Yes	Yes	Yes
W. Germany	Yes	Yes	Yes	Yes	Yes
Netherlands	Yes	Yes	Unknown	Limited	Yes
Denmark	Yes	Yes	Yes	Yes	Limited
Italy	Yes	Yes	Yes	Yes	Yes

SOURCE: NATIONAL SHIPBUILDING RESEARCH PROGRAM

There has also been a dramatic shift in the reliability of ship repair work. In 1982 Southwest Marine was able to win a major Navy maintenance contract. Over 90% of the work that was completed at San Francisco ports at that time was on Navy vessels. Since 1989 the percentage of work being completed by Southwest for the Navy has decreased dramatically. In 1990 only 40% of the work was done under contracts to the Navy. By 1991 it was anticipated that less than 30% of the work was for Navy contracts.

Southwest Marine has been achieving some success in attracting new commercial customers. In the past ten months a number of cruise ships have been worked at Southwest's facilities. All of these ships have been foreign owned. In 1991 Southwest Marine worked on Crystal Harmony, a cruise vessel, as well as the Jubilee and Sagafjord. Additionally Southwest has been successful recently in attracting commercial carriers such as Nedlloyd Lines to do work on their vessels here in San Francisco. Southwest is currently maintaining an active workforce of between 500-600 workers.

Service Engineering Company, which bought out Continental Maritime Company two years ago, moved last year into Continental's Pier 50 facilities. The former facility was at Piers 36-38 and has now been returned to the Port. SECO still relies on Navy repair work for about 90% of its current business. They are operating with a Navy maintenance contract that is scheduled to run until next year. After this contract expires they intend to market their services more to the commercial sector. SECO management feels that the lack of access to a drydock facility will hurt their chances of penetrating this market.

C. Implications for San Francisco

It is clear that the Port of San Francisco's situation in the ship repair industry is very volatile.

Due to the decrease in the amount of available Navy work, the commercial ship repair sector is being looked to as the primary market for San Francisco firms. San Francisco's continued presence in the ship repair industry will depend upon its ability to be competitive in the commercial ship repair industry. All industry analysts agree that this will depend upon increased efficiency of the industry, training of personnel and facility improvements.

Last year the Board of Supervisors approved a seven point program that it hoped would help to give San Francisco ship repair companies a boost towards becoming competitive in the commercial shipping industry. The plan calls for the Port to do the following:

Labor

One of the reasons that U.S. commercial ship repair industry is becoming more competitive is because of the quality of work in U.S. shipyards. The ship repair industry is becoming an increasingly more technologically advanced industry. This means that their is a growing dependence on skilled labor. To the extent that the United States can produce a highly skilled workforce it will remain competitive with foreign countries.

The relationship between labor and management in the ship repair industry has not always been tranquil. The perception of problems in the ship repair industry can be critical in the ability to attract new commercial repair work. Every day that a cargo ship is laid up it cannot carry cargo and make money for its owner. Worse yet are the problems for the cruise industry if a cruise ship is forced to layover for longer than anticipated. Cancellation of a cruise because of the failure to finish a job on time can mean refunds to many passengers and the diminished reputation of a cruise company.

Both labor and management have become convinced of their growing interdependence and as a result that relations have become considerably better in recent years.

Until 1986, union contracts were negotiated coast wide for all ship repair workers. The effect of this arrangement was that no one area had a substantial labor cost advantage over another. In 1986 Portland labor decided to end its participation in this arrangement and negotiate directly with management. The other ports soon followed suit and today labor management negotiations are localized. The result in San Francisco was that labor costs escalated in comparison to other ports.

Labor unions in San Francisco realized that this cost disadvantage meant less jobs for its workers so in the latest round of negotiations a number of work rule regulations were relaxed. Labor and management have agreed to create a multi-use training facility in order to begin craft apprenticeship programs and journey level skill enhancement programs.

Bay Area Forecast

Over the last decade the decline of the ship repair industry in San Francisco has been an accurate reflection of the industry trends nationwide. The available ship repair workforce has been reduced from 10,000 blue collar workers to just over 1,000. During one year alone, 1987, the number of ship repair yards operating in San Francisco was cut from 6 to 3 and now this number has been reduced to 2. The root causes for the decline locally, as well as nationwide, are the increased international competition, reduced U.S. flag fleet of vessels that are required to stop in U.S. facilities, and reductions in the Navy budget for ship repair work.

III. REGULATORY AND ENVIRONMENTAL ISSUES

The major environmental and regulatory issue facing the ship repair industry, similar to other maritime industries, is the issue of dredging. Additionally ship repair functions are subject to the provisions of the Bay Area Seaport Plan, the provisions of the California Environmental Quality Act (CEQA), and state and federal clean air, water quality, and workers protection legislation.

A. Regulatory Issues

BCDC Plans and Policies for Ship Repair

The Port's active ship repair facilities are at Piers 50 and 70. Additionally General Engineering, one of the "bicycle shops" uses Pier 38 on occasion to service ships calling on San Francisco.

BCDC plans and policies applicable to the ship repair industry are covered by the Seaport Plan. All of these of thelocations currently in use are designated for "Port Priority Use" in the plan. The Seaport Plan provides that permitted uses within a Port priority area include "marine terminals and directly related ancillary activities such as container freight stations, transit sheds and other temporary storage, ship repairing, support transportation uses including trucking, railroad yards, freight forwarders, government offices related to the Port activity, chandlers and marine services. Other uses, especially public access and public commercial recreation development, are permissible uses provided they do not significantly impair the efficient utilization of the Port area."

Ship repair is thus a permitted interim use within the provisions of the Seaport Plan. The Seaport Plan does provide that if these facilities become necessary for marine terminal use, however, they must be vacated.

State Regulations

As an industrial use on the Bay, ship repair functions are subject to air quality and water quality management districts' permitting procedures. The Water Quality Control Board conducts quarterly or semi-annual review of these facilities to measure wastewater emissions into the Bay. Southwest Marine has been active in exploring innovative ways of capturing runoff from the drydocks. They have built some safeguards into their operations including a trough that captures wastewater from flowing into the Bay and filters for its drainage facilities to prevent untreated runoff from running into the Bay.

1. Pay for environmentally safe maintenance dredging around shipyard facilities.

2. Provide fee concessions for carriers that perform ship repairs in San Francisco.

3. Build a 30,000 square foot training center and provide matching funds to shipyard training programs.

4. Spend $100,000 of the Port's marketing budget on promoting ship repair.

5. Give free dockage to ships involved in repairs at the Port.

6. Lower rents of shipyards renting Port property to offset capital expenditure by ship repair companies.

The final point which is to be implemented by the City of San Francisco, rather than the Port, will be to exempt from City payroll taxes all Port tenants whose principal business is ship repair and who have a workforce of at least 30 percent San Francisco residents; and exempt from the payroll tax subcontractors of these tenants which derive at least 70 percent of their revenues from the ship repair industry.

In October the Port prepared an official response to the seven point plan. The response, as well as the original Board of Supervisors resolution, are included as Attachment A to this report. To summarize the response:

1. The Port is constrained in its ability to provide maintenance dredging support by virtue of the limitations on disposal as well as the costs associated with upland disposal. This point is discussed in greater detail in the next section.

3. The Port has offered for use as a training facility a 30,000 sq. ft. building at Pier 70. The building is currently vacant.

4. Port staff has little experience in marketing the ship repair industry. The Port is in the process of hiring a marketing representative who will be responsible for marketing the ship repair industry.

5. and 6. The Port is going to renegotiate the lease arrangements with both Southwest and SECO. The current lease agreement with Southwest does not include a provision for dockage while ships are berthed at Pier 70. The agreement with SECO does provide for that. The current lease does not allow for rent credits for capital work that is performed by Southwest. The Port intends to negotiate a new lease agreement with both SECO and Southwest that will take into consideration both of these points.

Even assuming that the current process leads to alternate site designations, the cost of dredging is likely to rise significantly. The current cost of disposal is around $1.83 per cubic yard. If the Port is required to employ one of the other alternatives the costs could rise to $8.50 per cubic yard if it is able to dispose of dredged material offshore or up to $20.00 per cubic yard if the Port is required to dispose of the dredged material at one of the approved upland sites.

Both of the current companies have existing dredging permits they run through next year. While this is not currently a problem it will become a problem when next years allocation runs out. The amount of dredging, when combined with other site requirements could exceed the Port's annual limit. The Port would then be be forced tomake a choice in allocating its annual dredging limit. Competing maritime uses, such as container and bulk shipping as well as passenger cruises would be forced to compete against ship repair for the annual limit.

CEQA

Ship repair is considered a heavy industrial use, thus it is subject to the provisions of CEQA that apply to industrial uses. Both current ship repair sites, Piers 50 and 70 have been in operation as ship repair facilities long before the provisions of CEQA took effect. The recent moves, Southwest Marine's move from Pier 28 to Pier 70 in 1987, and Service Engineering Company's move to Pier 50 earlier this year, was a move from an existing ship repair facility to another (see Section V for a discussion of history of these sites) therefore CEQA review was not required in either of these cases.

If the Port were to pursue a new development CEQA review could become a serious consideration. The likely environmental impacts created by operating a new ship repair facility could be a serious deterrent to any new facility.

Additionally the Port has not done any tests on the current facilities. It is likely, given the length of time that these facilities have been in continuous use as ship repair facilities, that they contain significant underground toxic contamination. If the Port were to consider reuse of these facilities it is likely that the Port would face major cleanup costs associated with the resue.

C. Implications for the Port of San Francisco

The most significant implication for the future of ship repair at the Port associated with the regulatory and environmental issues identified above stem from the regulations of dredging. Both the costs and allowable volumes will determine wether or not both of these facilities will continue to be operational in the near future.

Previous problems have arisen with air quality problems in the operation of paint facilities at ship repair yards. Many of these environmental air quality problems have been greatly reduced because of new types of paint that have substantially reduced the level of contaminants, however airborne particles caused by stripping paint and painting itself, may raise some questions of compatibility for uses downwind.

B. ENVIRONMENTAL ISSUES

Regulation of Dredging

The regulatory issue which has the greatest potential to affect the future of the ship repair industry is the issue of dredging, particularly the disposal of dredged material.

As discussed previously in the profiles on Container Shipping, the Cruise Industry and Bulk and Breakbulk Cargo Shipping, the Port of San Francisco must perform regular maintenance dredging of sedimentation to maintain the appropriate depths at the ships berths. In past years the Port was authorized to dredge 500,000 cubic yards of material each year and to dispose of the material at the Alcatraz disposal site. In 1991, due to concerns over the environmental affects of disposal at Alcatraz, both the Port of Oakland and San Francisco were authorized to dispose of only 100,000 cubic yards each at Alcatraz. It is anticipated that similar limits will be in effect again this year for material that is of "questionable" contaminated nature.

Point 1 of the Board of Supervisors seven point policy plan in support of the survival of the industry proposed "environmentally safe maintenance dredging of all waters under the jurisdiction of the Port and with Port funds for ship repair activities". The total amount of dredging that is necessary to maintain operations at both Piers 50 and 70 is estimated at 125,000 cubic yards per year. Under terms of the current lease agreements both Southwest and SECO are responsible for their own dredging. Southwest has a dredging and SECO currently does not. SECO's lease also provides for a onetime credit of $7,625 for dredging. Under the terms of the Board plan the Port would be responsible for all of the dredging.

The regulatory agencies, principally the U.S. Army Corps of Engineers, BCDC and the Regional Water Quality Board are engaged in developing a Long Term Management Strategy for designating a pool of long term disposal sites. This process will include an analysis of overall dredging requirements and environmental concerns, leading to selection of appropriate disposal sites. The alternatives to the Alcatraz site that are being analyzed include both ocean disposal and upland disposal sites.

Boilermakers
Plumber/pipefitters
Electricians
Carpenters
Painters
Laborers
Machinists
Operating Engineers
Teamsters
Sheetmetal
Laggers

Additionally the City collects tax revenue from the two remaining Ship Repair companies. The Tax Collectors office reports that the ship repair industry paid over $360,000 in payroll taxes for calendar year 1990. They also contributed nearly $65,000 in utility tax payments and $300,000 in property taxes.

The Port of San Francisco's Economic Impact Report prepared in 1988 for the Port presented an estimate of the impacts of the ship repair industry on San Francisco. Although the information is now nearly four years old it still provides an interesting insight into the impacts of this industry on the local and regional economy.

In 1986 the report estimated that an addition of $1 million in ship repair contracts locally had the following ripple impact on the Bay Area economy:

Category	Direct Impact	Direct, Indirect Induced Impact
Employment	9 FTE*	15 FTE
Payroll ($1,000)	$267	$374
Revenue ($1,000)	$1,000	$1,470

(FTE= Full time equivalent positions)

Most of the benefit from these firms accrues directly to the economy of San Francisco. The two firms are estimated to spend nearly 80% of the cost of business with San Francisco firms.

C. Implications for San Francisco

If San Francisco were to lose the ship repair industry it would have an impact on the economic well being of blue collar employment in San Francisco. The economic data indicates that the city benefits indirectly through employment and revenue generated by this industry.

The implications associated with the environmental impacts of ship repair functions will not be fully understood until the EIR is performed for the Waterfront Plan. It is not anticipated that any new ship repair developments will occur in the foreseeable future that would require any type of comprehensive Environmental Review. So long as the existing facilities continue in operation it is not anticipated that environmental review will be a problem for the industry.

IV. FINANCIAL AND ECONOMIC ISSUES

The major financial and economic issue confronting the Port of San Francisco in relation to the ship repair industry is whether or not this industry will be able to survive its current economic situation, and what would be the impacts for both the Port and the San Francisco Bay Area if this industry were to collapse.

A. Financial Issues

The major financial benefit realized by the Port from the Ship Repair industry is from lease payments paid by Southwest and SECO. Below is a description of each of the lease arrangements:

Overall Payments to the Port

Payment Type	SECO	Southwest Marine
Monthly Rent	$58,038	$106,975
Dockage	$16,500	not applicable
Total Payments	$74,538	$106,975
Credit		
Rent Credits	$3,937*	not applicable
Dredge Allowance	$7,625**	not applicable
Net Payment	$62,975	$106,975

(* for purchase of shed on Pier 54)
(**onetime credit for disposal of up to 50,000 cubic yards)

B. Economic Issues

Perhaps more important than the financial benefits that accrue directly to the Port from these operations are the economic benefits realized from having the Ship repair industry in San Francisco. The ship repair industry represents one of the last sources of high paying blue collar employment in San Francisco. Most shipyard workers are paid an average wage in excess of $40,000 per year. Workers are employed in the following different trades:

Work on ships are generally broken down by two categories: hull work and topside work. In order to perform hull work the facility must have a drydock. Only Pier 70 has a drydock and is the only facility in the Bay Area that is able to perform hull work. To perform topside work you need only to have sufficient berthing capability. Additionally it is desirable to have access to sufficient power, warehousing, and servicing equipment, such as machine shops and other service facilities.

The smaller"bicycle shops" often operate without any special equipment other than access to piers. They either will work on a vessel while it is unloading its cargo, or will pay for temporary access to a pier, such as Pier 38 that will allow it to gain temporary access to a facility.

B.Existing facilities and opportunities

Pier 50

SECO operates out of Pier 50 and Sea Wall Lot 337. They occupy around 1,000,000 sq. ft. at this site. Use of the site is broken down as follows:

Building area	186,000 sq. ft.	(18.7% of total)
Water area	360,000 sq. ft.	(36.1% of total)
Open land area	524,795 sq. ft.	(45.2% of total)

SECO has an existing 20 year lease on its facility.

SECO moved into Pier 50 when it bought out Continental Maritime. The facility has two 1,000 foot repair berths, each with 60 feet of water alongside them. SECO is constrained in its repair work and can only do topside work. Pier 50 does not have a drydock (Continental sold its drydock prior to being bought out by SECO). The management of SECO feels that it is at a disadvantage in its ability to bid on repair projects by not having access to a drydock*

(*Technically SECO has access to the drydocks at Pier 70, however under the terms of the lease arrangement with Southwest, SECO would be forced to pay a $10 per hour, per man, surcharge, a cost that SECO argues makes use of this facility prohibitively expensive).

Pier 70

Southwest Marine operates at Pier 70. The demise of Todd Shipyards in 1987 gave Southwest Marine the opportunity to takeover a substantial portion of the lease, facilities and finger piers located between Piers 68 and 70 some 24 acres in total. The Southwest Marine has over 2,000,000 square feet total. The total facility is broken out as follows:

The seven point ship repair survival plan, recently approved by the Board of Supervisors, and mentioned in Section II of this report, contains 6 points of implementation by the Port of San Francisco. Four of the points will have a direct financial impact upon the operations of the Port. Point 1 in the plan calls for the Port to assume the costs of providing maintenance dredging. Given current disposal rates of between $8.50 to $20 per cubic yard for disposal at approved disposal sites the Port would have to pay at a minimum an additional $1,062,500 for disposal of dredged material. This represents a nearly $900,000 increase over the current costs paid by the Port for disposal of dredged material. Point 2 in the plan calls for dockage fee concessions by the Port of San Francisco for carriers that perform ship repair work in San Francisco. The total impact of this would depend on the number of ships that choose to have repair work done here. Depending on the size of the vessel, the 24 hour dockage fee is between $61 and $8,848. Some portion of this would be waived for these ships.

Point 5 calls for free dockage to ships involved in ship repair. The ship repair dockage revenue to the Port over the last three years was:

	1988	1989	1990
Revenue:	$536,000	$515,000	$85,000*

(*1988 and 1989 two companies- SECO and Continental paid dockage fees. 1990 only SECO paid; additionally SECO received a partial waiver to help offset cash flow problems with the Navy contract)

Point 6 calls for Rent reductions by the Port to ship repair companies leasing Port property. Revenue from leasing Port property to ship repair companies was over $2,000,000 in Fiscal Year 1990-91. If all of the rent was reduced to offset capital expenditures by ship repair companies this would eliminate this source of revenue for the Port.

V. DESCRIPTION OF EXISTING OPERATIONS AND FACILITIES

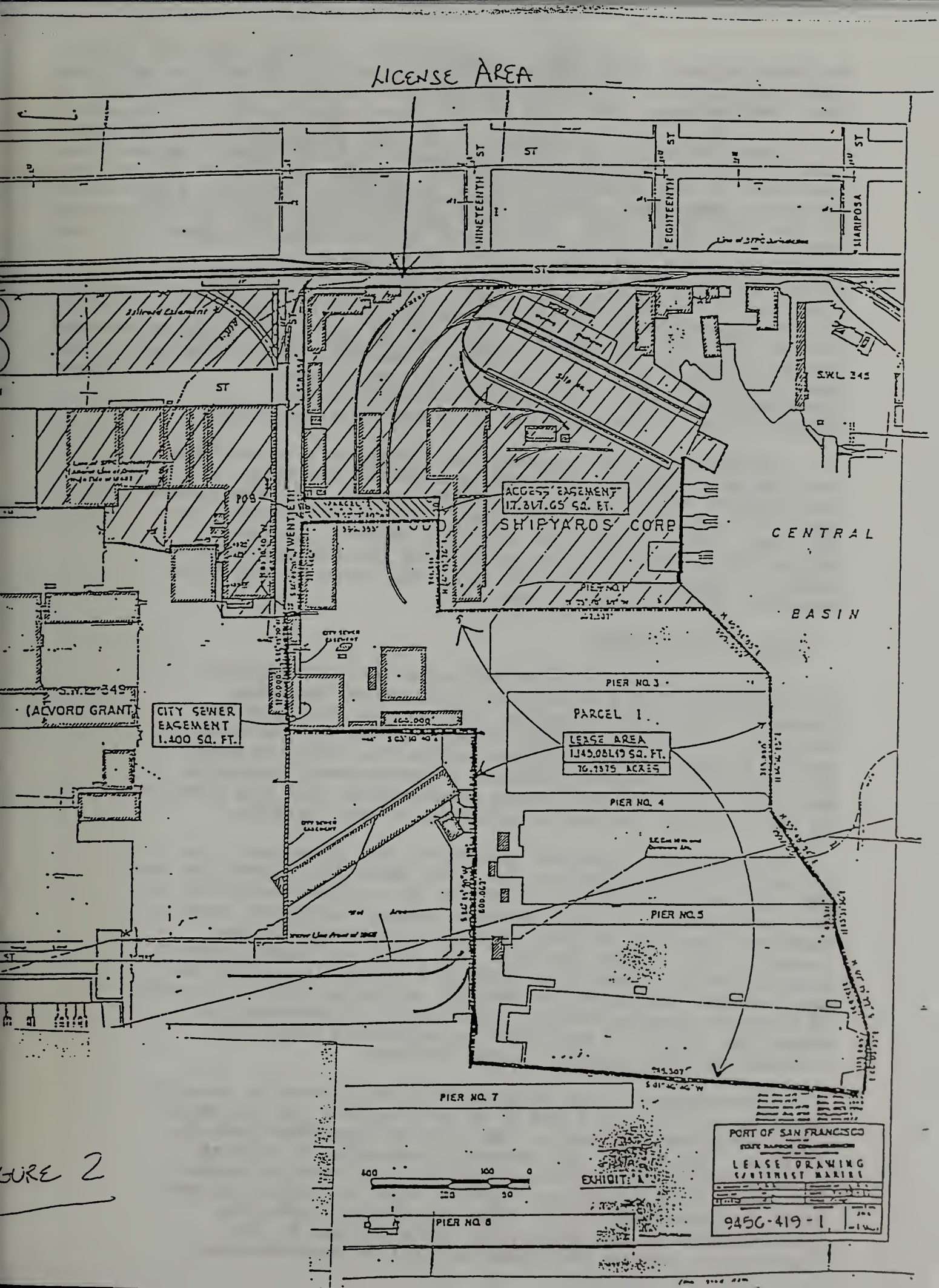
As ship repair contracts have decreased the number of piers dedicated to use as ship repair facilities have also decreased. Prior to 1987 ship repair operations were in continuous use at Piers 26-28, 38-40, 50 and 70. Now continuous operations occur only at Pier 50 (SECO) and Pier 70 (Southwest Marine). As previously mentioned. General Engineering occasionaly uses Pier 38 for some of its work.

A. Operations of the Ship Repair Industry

Ship repair operations are generally classified as either full service or topside only operations. There are three types of activities that are generally performed in ship repair yards:

1. Unscheduled or emergency repair and casualty work
2. Scheduled maintenance and inspection of ships
3. Major overhauls and conversions

LICENSE AREA



GURE 2

Building area	293,225	(13.3%)
Water area	697,500	(31.7%)
Open land area	1,211,301	(55.0%)

Approximately 1,145,000 sq. ft. of this property is held through a 30 year lease agreement with the port. The remainder of the property is held in a month to month licensing agreement. When Southwest Marine moved into Pier 70 the Port asked them The Port was concerned that if a portion of the area was left vacant and unattended health and safety problems would arise. This license area, illustrated in Figure 2, consists primarily of the area that is not integral to Southwest's operations. Southwest Marine has recently expressed an interest in vacating the license area and turning it back over to the Port. Some of the buildings in the "license area" have been determined as being buildings with some historical significance. Especially of note is the former Bethleham Steel headquarters at the corner of 20th and Illinois Street.

Perhaps most significantly for Southwest's operations are the two drydocks that are included in the lease arrangement with the Port. Drydock Number 2 is the second largest drydock on the west coast with a total length of 900 feet. The drydock has a lifting capacity of over 65,000 tons. This drydock, as well as the smaller Drydock Number 1 allows Southwest to offer full service ship repair services when it bids on contracts.

Other opportunities

Although outside of the Port's current jurisdiction, the decommissioning of Hunters Point Naval Shipyard presents the most interesting opportunity for land use changes in the ship repair industry. The Navy intends to vacate Hunters Point Shipyard within the next two years. The City, with the San Franisco Redevelopment Authority in the lead, has been conducting negotiations with the Navy as to the terms of the decommissioning of this facility.

The shipyard contains waterfront facilities for ship berthing and dry dock repairs. Dry dock #4, located on the grounds of the shipyard, is one of the largest drydocks on the west coast. It also contains support services, such as machine shops and storage that are necessary for the operation of a major facility. The Port and Redevelopment agency are considering conducting a feasibility study on the benefits and costs to the city of taking over a portion of the ship repair facility. The Port is interested in exploring wether or not their is sufficient demand to warrant the Port purchasing the drydock.

In addition to the question of demand there is also the question of what uses are to be pursued for the Hunters Point Shipyard, as well as the cost of acquisition of the drydock. The Mayor has formed a committee to look at various options for reuse of the Hunters Point shipyard facility. This committee, together with the Redevelopment Authority, are pursuing a range of options including consolidation of the University of California at San Francisco's various facilities, as well as opportunities

critical decision making point whether to continue operating at Pier 50. If arrangements can be made for SECO to have access to a drydock facility then it will continue to operate. If lease amendments can be made that give SECO access to the drydocks at Pier 70 at a rate that makes it economically competitive then SECO is likely to continue to operate out of Pier 50. If the City of San Francisco decides to pursue the acquisition of Drydock #4 at the Hunters Point Naval Shipyard then it is possible that SECO will locate its operations to Hunters Point.

The smaller bicycle operations, specifically General Engineering will continue to seek temporary access to piers as business demands. These smaller operations do not foresee having the demand, or need, to enter into any long term arrangements with the Port to lease space for their operations.

for housing and other uses at the site. Not all of the options would be compatible with the continued use of the site as a shipyard facility.

Implications for San Francisco

With recent changes in the ship repair industry in San Francisco current operations have become centralized at Piers 50 and 70. These two facilities have long been operated as ship repair facilities for the Port although under different ownership.

Pier 70 is located in an industrial area, adjacent to areas of the city that are intended to continue to be in industrial use. Pier 50 is located near anticipated residential development that will occur as part of the Mission Bay development project. The major problem for the continuing operations of SECO at Pier 50 is the lack of access to a drydock. If the City and Port decided to pursue acquisition of Drydock #4 at Hunters Point Shipyard it would present an opportunity to alleviate SECO's problems of access to a drydock.

VI. CONCLUSION

The continued viability of the ship repair industry for the Port of San Francisco is at a critical stage. The industry in San Francisco will have to be able to attract commercial business in order to continue to survive. The ability to continue to attract this business will depend in part upon factors outside the control of individual companies or the Port, such as discontinuation of subsidies provided for the industry in other countries.

Some of the facts that will ensure the future of this industry are within the control of local government. The seven point survival plan represents an attempt by local policy officials and the industry to create a competitive market locally. However, adoption of the plan in its entirety could have significant financial impacts on the Port, that may or may not be offset by higher revenues generated by the industry.

The most important reason for the continuation of this industry is the number of blue collar jobs that are created. With average wages above $40,000 annually and with a significant number of jobs indirectly related to the industry it is clearly within the interests of the Bay Area to see this industry continue in operation.

Current market trends would seem to indicate that we can expect that ship repair operations will remain at a maximum of two locations for the foreseeable future. The current operation at Pier 70 will continue at least as long as Southwest Marine is able to attract business to its operation there. Service Engineering Company is facing a

PROPOSED ISSUES FOR DISCUSSION WITH INDUSTRY EXPERTS

1. What kind of improvements are needed to increase San Francisco's competitive position in ship repair?

2. What is the ship repair capacity of existing facilities? How much would that increase if the drydock facilities were acquired by the Port?

3. What are physical access requirements needed to serve a business? What types of enviornmental imapcts, traffic congestion, air quality impacts, are created by having a ship repair facility?

4. What are the prospects for the ship repair market in the near term, and what factors will influence San Francisco's competitive position in this industry?

5. Are there regulatory or environmental constraints that hamper ship repair activities (e.g. disposal of hazardous waste, air pollution controls, work rule regulations?)

VII. DISCUSSION ISSUES

There are a number of issues that the Advisory Board should consider in the decision making process with respect to land allocations for the Ship Repair industry:

1. What are the prospects for ship repair remaining a viable entity at the Port of San Francisco.

2. Is there currently sufficient space to accomodate the ship repair industry? Should we dedicate less space, or should we be looking to consolidate and provide other land use opportunities for the industry?

3. Should the Port expect ship repair to be self supporting or should their be subsidies provided to the industry to keep them viable along the waterfront?

4. Should the Port be reserving former ship repair facilities for reuse as ship repair facilities, in case their is a dramatic increase in ship repair demand in the Bay Area?

5. What locational factors should be taken into consideration when determining the best site for a ship repair facility? Do the existing facilities meet these locational requirements?

STATUS REPORT FOR SUPERVISOR JIM GONZALEZ

SEVEN POINT PLAN FOR SHIP REPAIR
October 2, 1991

1. Maintenance Dredging

The Port Commission supports the need to dredge for all industries that need it. Our ability to provide financial support will be determined in large measure by conditions attached to dredging permits and the costs that result from these conditions.

The Port received on September 30, 1991 authorization to proceed with dredging of 100,000 cubic yards of material from its ocean terminals. This is one-fifth of what we had hoped we would be able to dredge and dispose of at the Alcatraz dumpsite this year. We were further advised that at least 12,000 cubic yards of the remaining material would most likely need to be disposed of in an upland location, most likely a landfill located in Petaluma. The Port is working with the regulatory agencies to determine procedures and costs associated with disposing of this material. We do know that the access constraints in getting to the landfill will raise the cost of disposal dramatically, perhaps by as much as ten times. Of the remaining dredging required, we know that approximately 25,000 cubic yards will be permissible for Alcatraz next year. The disposal requirements for the rest of the project are unknown at this time.

The requirement to dispose of the 12,000 cubic yards in an upland location is especially noteworthy. The principal reason the regulatory agencies have specified that this must be disposed of in an upland location is because these sediments contain chemical contaminants generally found in marine paint. Our scientists are concerned that the regulators might take the same position for the sediments to be dredged from the ship repair facilities. The combined volume from the two ship repair companies is estimated to be in excess of 200,000 cubic yards per year which far exceeds the capacity of any existing authorized upland location.

Given these uncertainties, the Port feels it most prudent to address the other points of the plan first while the regulatory issues surrounding dredging become clearer. Nevertheless, we do believe that, regardless of who pays for the dredging, the individual companies should apply for permits on their own since it appears that the regulators will be capping individual applicants at around 100,000 cubic yards per year.

8/28/91 - As amended in Committee.

FILE NO. 173 91-1

RESOLUTION NO. 744-91

[Ship Repair -- Survival Plan]

URGING THE MAYOR TO URGE THE PORT COMMISSION TO ADOPT A SEVEN POINT POLICY PLAN IN SUPPORT OF THE SURVIVAL OF THE SHIP REPAIR INDUSTRY IN SAN FRANCISCO, AND URGING THAT SUCH POLICIES BE IMPLEMENTED BY THE MAYOR, PORT COMMISSION, AND EXECUTIVE DIRECTOR OF THE SAN FRANCISCO PORT.

WHEREAS, The San Francisco maritime industry that was prosperous in the 1960's employed over 20,000 workers has critically declined to the present level of approximately 500 workers at two major shipyards; and

WHEREAS, The ship repair industry is a tremendous source of blue collar jobs from eleven trades and unions with a significant representation of 45% minority; and

WHEREAS, A revitalized ship repair industry would create a significant economic contribution to the City as demonstrated in San Diego where 8,200 ship repair workers boost the local economy by $1 billion annually; and

WHEREAS, The San Francisco Board Supervisors recommends a seven point policy plan in support of the survival of the ship repair industry in San Francisco, as follows:

The San Francisco Port shall provide:

1. Environmentally safe maintenance dredging of all waters under the jurisdiction of the Port and with Port funds for ship repair activities.

2. Development of and provision for fee concessions by the Port of San Francisco for carriers that perform ship repair in San Francisco.

3. A training center in the size of 30,000 square feet and provide matching funds to shipyard training programs.

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4. The expenditure of ~~seventy-five percent (75%) of~~ $100,000 in the current fiscal year the Port's marketing budget toward the development of ship repair in San Francisco.

5. Free ~~wharfage~~ dockage to ships involved in ship repair by the Port of San Francisco.

6. Rent reductions by the Port of San Francisco to ship repair companies leasing port property to offset capital expenditures experienced by ship repair companies.

7. Support of amendments to the Municipal Code that would provide an exemption from payment of the business payroll tax for: 1) all tenants of the Port of San Francisco that are principally in the business of ship repair and with a workforce consisting of at least 30 percent San Francisco residents and 2) subcontractors of ship repair businesses that derive at least 70 percent of their revenues from the ship repair industry.

Now, therefore, be it

RESOLVED, The San Francisco Board of Supervisors urges the Mayor to urge the Port Commission to adopt the seven point policy plan recommended by the Board of Supervisors in support of the survival of the ship repair industry in San Francisco, and, be it

FURTHER RESOLVED, The Board of Supervisors urges the Mayor to urge the Port Commission, and Executive Director of the Port to implement the policy plan.

ATTACHMENT

2. Fee Concessions

The Port staff has developed a draft dockage waiver program to be offered to carriers that call the Port for cargo handling activities. The program would work as follows: carriers providing service from Port of San Francisco marine terminals would be eligible for a dockage credit if they choose to have their ships worked on in a San Francisco ship repair yard. Dockage fees normally assessed at the cargo terminal or the passenger ship terminal would be waived for the port call during which the ship undergoes repairs or maintenance.

The Port has evaluated the impact of this waiver on its carriers and has reached the following preliminary conclusions. First, for cargo carriers, the credit will be most attractive to carriers that empty their ships in San Francisco before loading outbound cargo. This is the case for the Port's largest carrier, Nedlloyd Lines. Nedlloyd has a total of ten calls per month and has recently drydocked a ship at Southwest Marine. This fee concession could encourage them to do more of this. Second, for passenger carriers, again San Francisco is generally a point of origination or termination of a cruise. Consequently, ships are generally empty while in port and thus drydocking could be easily accomplished.

An outstanding issue is under what circumstances the Port should offer the fee concession on the work of other repair companies that do not have facilities in San Francisco but which may wish to use port piers to perform sporadic repairs on a casual basis. Since these firms do not have the costs of maintaining a permanent facility, they can often undercut larger shipyards. This point will be discussed with our local shipyards and ultimately will be a policy matter for the Port Commission.

3. Training Center

The Port has agreed to provide a building for use as the training center. On September 9, 1991 a meeting was held between the Port, the ship repair companies and the unions to discuss the proposal. The unions agreed at that meeting to prepare a site plan for the training center We were advised by Mr. Richard Harden that the plan should be ready for discussion this week.

4. Marketing Budget

Marketing of ship repair services is a specialized area which up until now the Port has had no direct knowledge of. In light of this, we have been trying to schedule

meetings with the companies to learn more about what they do. The first of these is tentatively scheduled for next week.

In preparation for the meeting, the Port staff has surveyed shipping lines with headquarters here in the Bay area and determined that a substantial problem is one of visibility. Many shipping lines have an incorrect impression of the capabilities of our companies. At present we are researching what factors are considered by shipping lines when making decisions about where to have repairs and maintenance performed on their ships. This work is ongoing and should be completed in the next month. We expect that this will be useful in our discussions with the ship repair companies about marketing. We are also conducting a survey of the competitiveness of our ship repair facilities relative to those in San Diego and Portland. We will be receiving a report on this work later this week. Once the market research is complete, we will be then develop the details of the marketing program.

Responsibility for the marketing program will rest with Mr. Michael Janis. The Port is intending to add a marketing position to Mr. Janis's staff to deal with ship repair. At present, this position has been approved by the Board of Supervisors and is held on reserve by the Finance Committee. We have drafted a request to the Committee to have the reserve for this position lifted so that we can begin the hiring process. The hiring process will of course be subject to the City's Equal Employment Opportunity guidelines. We will present a marketing plan within one month of the position being filled.

5. Free Dockage

6. Rent Reductions

Free dockage and rent reductions are being handled together since they represent two manifestations of the same thing: facility costs paid by the companies to the Port. They are also assessed differently on the two major companies. Southwest Marine pays no dockage. Instead they pay a flat rent for the use of their facility including cranes and drydocks owned by the Port. Service Engineering company does pay dockage but their lease includes no capital equipment for which they might eligible for a credit. Their rent exclusive of dockage is also lower than that paid by Southwest Marine..

Given the differences of the lease structures, how the Port addresses each of these points will of necessity be very lease specific. Nevertheless, how the two companies compare to one another must also be considered.

Since Southwest Marine was the first to put a proposal before the Port, we have begun by looking at their overall lease arrangements. We have expressed to Southwest Marine a willingness to consider credits for capital improvements to the cranes and drydocks owned by the Port and leased to them. In order for us to consider this, we have asked for an accounting of the $5.4 million that Southwest Marine claims to have spent over the last three years on capital expenditures at their facility here in San Francisco. To date we have not received this accounting although Mr. Hanson has assured me that it is being prepared by his staff. It should be noted that the $5.4 million which Southwest Marine claims to have spent is greater than the total rent paid to the Port over the same period. Consequently, the accounting for these expenditures is particularly critical. Thee are two aspects to the credit for capital expenditures, past expenditures and future expenditures. We believe we will have greater flexibility in dealing with past expenditures. Future assistance will be more difficult to manage given the uncertainty surrounding future revenue growth for the Port.

Service Engineering requested of the Port and we agreed to allow them to defer a portion of dockage payments to the Port to enable them to deal with some cash flow difficulties surrounding their Navy contracts. This agreement is, however, informal at present and will be revisited once we have made more progress with Southwest Marine.

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PORT OF SAN FRANCISCO
SAN FRANCISCO PORT COMMISSION
WATERFRONT PLAN ADVISORY BOARD

STATEMENT OF FACTS AND ISSUES AS TO THE LAND USE REQUIREMENTS OF TEMPORARY & CEREMONIAL BERTHING FACILITIES FOR COMMERCIAL VESSELS

(Revised 8/28/92)

The following provides a brief statement of the facts and issues relating to the land use requirements of Temporary and Ceremonial Berthing Facilities, as identified in the profile report prepared for this water-dependent activity.

I. FACTS AND ISSUES RELATED TO THE ADEQUACY OF CURRENT LAND AND FACILITIES TO MEET FUTURE INDUSTRY NEEDS

- The Port receives requests for temporary and ceremonial berthing facilities from cargo ships, commercial fishing boats, yachts and pleasure boats, as well as ships from the U.S. Navy and Coast Guard, National Oceanic Atmospheric Association (NOAA) and foreign Navies. There is a wide range of activities for which such requests are necessary, including loading and unloading of materials, minor repairs, shore visits for crew members, ships open for public visits, and "lay berthing" of cargo vessels that are between assignments. Vessels may require berthing accommodations for time periods ranging from a few hours, to weeks, depending on the nature of the activities.

- While the number of temporary berthings has been relatively stable in the past two years (130 in 1990 and 137 in 1991), the rate at which they occur is variable due to a number of factors. Therefore, the demand for temporary berthings is difficult to predict.

- The Port provides "Courtesy of the Port (COP)" status for most ceremonial berthing arrangements, in which dockage fees are not collected by the Port. The COP status extended by the Port, combined with San Francisco's reputation as an international cultural and tourist center, its convenient location, and the availability of berthing facilities make the City a popular choice for visiting vessels. Even so, the demand for ceremonial berthing also has varied (45 COP vessel accommodations in 1990, and 78 in 1991), because the promotional events do not necessarily occur on a regular basis.

- Because most of the Port's berthing facilities are actively used, and because of the difficulty in anticipating temporary and ceremonial berthing needs, the Port provides berthing facilities by matching the size and needs of each vessel with the current availability of piers that could accommodate such a vessel. Such berthing facilities include Piers 30, 32, and 38 and the east side of Pier 45 (which are currently vacant), Pier 35 (the cruise ship terminal, which is available during off-season months or between cruise ship calls), and Piers 9 and 27 (when existing operators are not using the berthing facilities). These facilities cannot accommodate all vessels, however. Piers 30 and 32, for example, have deteriorated fender systems that do not readily accommodate many smaller vessels.

- In order to accommodate the full range of vessel needs, temporary and ceremonial berthing facilities ideally should have a) sufficient water depths (up to 35 feet); b) truck and bus access and turnaround areas; c) utility service (e.g. water, electricity, sewage); d) adequate pier understructure systems to support heavy loads and some parking, as well as fender systems to protect fragile vessels; e) floating docks that provide higher degrees of protection from tidal waves and surge action for large yachts; and f) security against vandalism to ships. However, given the irregularity of demand and competing needs for other berthing activities, it is difficult to justify dedicating a facility exclusively for temporary and ceremonial berthing use.

II. IMPLICATIONS OF REGULATORY AND ENVIRONMENTAL ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The regulatory and environmental issues with the greatest potential impact on temporary and ceremonial berthing facilities are a) resolution of the dredge disposal problem in a financially feasible manner; and b) BCDC plans and policies which restrict parking and apply restrictions on the extent and manner in which additional fill is authorized (which would be triggered by any structural repairs to the piers), c) compliance with handicap access laws. An additional environmental issue is the potential adverse impact on water quality caused by temporary and ceremonial berthing activities that do not meet adopted water quality standards.

III. IMPLICATIONS OF FINANCIAL AND ECONOMIC ISSUES WITH RESPECT TO LAND USE REQUIREMENTS

- The Port collects dockage fees for visiting vessels, although provides Courtesy of the Port (COP) status for most ceremonial vessel calls (in which no dockage fees are charged). The Port does collect nominal fees for administrative coordination of promotional events associated with many ceremonial berthings. In any case, the direct financial benefits from temporary and ceremonial berthing facilities are very limited and would be lower than the revenue-generating capability of most alternative businesses with berthing facility needs. To the extent it was possible to dedicate a site exclusively for the purpose of accommodating temporary and ceremonial berthing, the revenues generated would not be sufficient to support improvements to or maintenance of the facility.

- Temporary and ceremonial berthing is regarded as a promotional service provided by the Port, and does provide some benefits indirectly from increased patronage to commercial establishments on Port property, and enhancing San Francisco's reputation as a port of call.

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TEMPORARY & CEREMONIAL BERTHING FACILITIES PROFILE

I. INTRODUCTION

The Port of San Francisco accommodates a variety of vessels that require temporary and ceremonial berthing facilities. Vessels require temporary berthing facilities for activities ranging from loading/unloading of supplies, fuel, and equipment, to minor repairs and modifications, to shore visits for crew members. In some cases, cargo vessels may simply require a docking facility while on lay berthing status between assignments. Occasionally, these berthing arrangements are provided in conjunction with ceremonial events, such as the Navy's Fleet Week and Coastal Awareness Week events. During these events, the ships are usually open for visits from the general public. Vessels may require temporary and ceremonial berthing facilities for time periods ranging from a few hours, to weeks, depending on the nature of the activities.

II. TRENDS

The Port receives requests for temporary berthing facilities from cargo ships, commercial fishing boats, and yachts. In addition, ships from the U.S. Navy, U.S. Coast Guard, National Oceanic Atmospheric Association (NOAA), and foreign Navies are accommodated in temporary and ceremonial berthing arrangements. Excluding ceremonial berthings, the number of temporary berthings handled by the Port have been steady for the past few years (130 in 1990, 137 in 1991). (Table 1) These included fishing and pleasure boats, as well as cargo ships on lay berth. Demand from these vessel types can be affected by a variety of factors. For instance, commercial fishing boat traffic may increase during certain times of the year.

Table 1:
Temporary & Ceremonial Berthings at San Francisco (1990-1)

	1990	1991
Fishing	16	26
Pleasure	49	34
Lay Berth	65	77
TOTAL	130	137

Aside from the annual events sponsored by the U.S. Navy and Coast Guard, demand for ceremonial berthing facilities have varied. The Port provided 45 Courtesy of the Port (COP) vessel accommodations in 1990 and 78 in 1991 (See Section III-B: Port Courtesy). However, it is difficult to anticipate demand for such ceremonial activities annually, as these activities may coincide with different anniversaries, celebrations, and other promotional events, that vary in frequencies. Furthermore, the Port regularly provides COP status for U.S. Navy ships. As a consequence, global events can

also affect the demand for temporary berthings. The Persian Gulf War last year resulted in an increase in the number of naval and contracted merchant vessels that required temporary berthing facilities to take on equipment, supplies, and crew, as well as to have modifications performed on the vessels for wartime service.

San Francisco has a locational advantage relative to the other Bay Area ports. Due to San Francisco's attraction as an international cultural and tourist center, ships calling in the Bay Area for crew shore visits usually prefer to berth in San Francisco. In addition, San Francisco's geographical location adjacent to the Bay's entrance as well as the lack of available waterfront berthing facilities in other Bay Area ports are other reasons for the city's popularity as a port of call for visiting vessels.

III. FINANCIAL & BUSINESS CONSTRAINTS

A. Dockage

Generally, the Port charges dockage fees for such vessels as commercial cargo ships, fishing boats, and yachts. Dockage rates are charged according to a standard tariff schedule issued by the Port. A cargo ship may need to be lay berthed for a few days before proceeding to the cargo terminals, while a large fishing vessel may need to be refueled from tanker trucks because it cannot fit the marine fuel dock in Fisherman's Wharf. Similarly, a visiting yacht may request temporary berthing if it is too long to be accommodated in any of the Bay Area marinas. Other reasons include the need for repairs, supplies, or inspections.

B. Port Courtesy

The Port accommodates most ceremonial berthing requests free of charge under a Courtesy of the Port (COP) status. These include accommodations not only for the U.S. Navy and Coast Guard visits, but also U.S. and foreign naval vessels, and NOAA research ships. Even though the Port does not receive direct dockage revenues from these ceremonial berthings, it does benefit indirectly through increased patronage from visiting crew members to waterfront's commercial and retail establishments, such as Fisherman's Wharf. The use of COPs also benefits San Francisco's image in the international community.

The Port does charge fees for administrative support in conjunction with some of these ceremonial events. These include staff coordination for arrangements and permits with other city departments. In some cases, the Port also charges permit fees for the rental of pier shed areas. The Port provides COPs as a courtesy service, and any revenue that it collects are nominal in nature. While there is the possibility that the Port could charge dockage fees for ceremonial berthing facilities, this may discourage these berthing activities and ultimately hurt the Port's other commercial activities near Fisherman's Wharf.

IV. FACILITIES

Because most of the Port's berthing facilities are actively utilized for industrial or commercial maritime uses, and because it is difficult to anticipate the frequency of ships requiring temporary berthing facilities, the Port provides berthing facilities by matching the size and needs of each vessel with the current availability of piers that could accommodate such a vessel. Facilities used for such berthings range from Piers 30, 32, 38, and the east side of Pier 45 (which are currently vacant), to Pier 35 (which is the cruise ship terminal and which can accommodate temporary berthings during the off-season months for cruises or between cruise ship visits). While Piers 30 and 32 provide adequate water depths for most large commercial vessels, the piers' deteriorated fender system limits the type of vessels which can be berthed. Pier 45 can accommodate vessels with a draft that does not exceed the limited water depths around the pier, and Piers 9, 27, and 35 are available only when the existing operators on those piers are not using their berthing facilities.

Provision for temporary and ceremonial berthing facilities can at best be marginal in the future, depending on the level of development on Port lands for higher revenue-generating uses or other maritime and recreational activities. Nevertheless, it is possible to address the physical needs most suitable for these berthing arrangements.

* The piers should have sufficient water depths (up to 35 feet) for large commercial vessels and fishing boats.

* The pier should also be accessible by large service vehicles and buses including turnaround/backup movements and loading/unloading activities. This includes an adequate pier understructure system to support heavy loads as well as minor parking facilities.

* Utilities, such as potable water, electricity, telephone, and sewage pumpout, should be provided. There should also be some sort of a fender system to protect fragile vessels, such as yachts.

* Large yachts may also desire separate floating docks with higher degrees of protection from tidal waves and surge action.

V. CONCLUSION

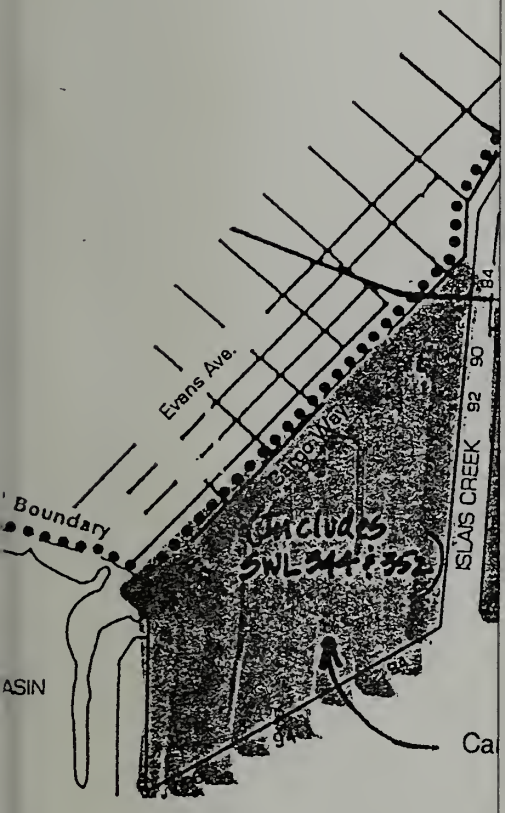
While temporary and ceremonial berthing facilities provide opportunities for international promotion, public access to the waterfront, as well as indirect revenues to commercial establishments in inland areas, the frequency and nature of these uses do not generate significant revenues to the Port, and are really a courtesy service that the Port provides. However, potential development on piers that are currently used for these berthing arrangements (such as Piers 30 and 32) may limit the Port's ability to accommodate future demand for temporary and ceremonial berthing facilities. Nevertheless, due to San Francisco's strategic location in the Bay Area and the opportunities for promotion, provisions for temporary and ceremonial berthing facilities should be explored as part of other development projects on the waterfront.

O:berth

PRELIMINARY - SUBJECT TO

PORT OF SAN FRANCISCO
Waterfront Plan - Phase One
Preliminary Draft: August 4,

(NOTE: Please refer to "Key
of the Phase One mapping a



PRELIMINARY - SUBJECT TO

PRELIMINARY - SUBJECT TO PUBLIC REVIEW AND REVISION

PORT OF SAN FRANCISCO
Waterfront Plan - Phase One (Water-dependent Activities Map)
Preliminary Draft: August 4, 1992

(NOTE: Please refer to "Key to Map" document for a detailed explanation of the Phase One mapping approach and designations.)

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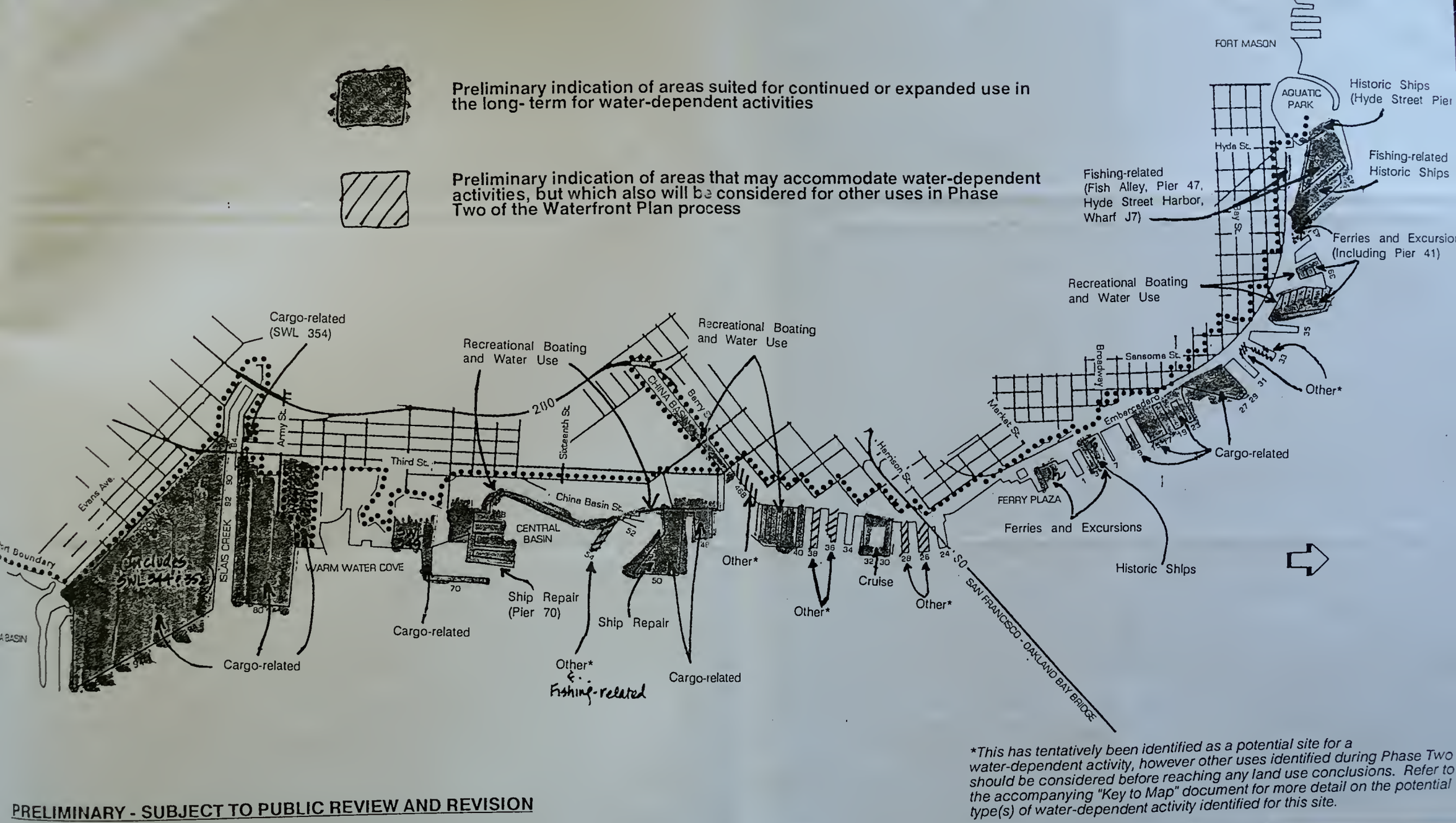
Preliminary indication of areas suited for continued or expanded use in the long- term for water-dependent activities

Preliminary indication of areas that may accommodate water-dependent activities, but which also will be considered for other uses in Phase Two of the Waterfront Plan process



*This has tentatively been identified as a potential site for a water-dependent activity, however other uses identified during Phase Two should be considered before reaching any land use conclusions. Refer to the accompanying "Key to Map" document for more detail on the potential type(s) of water-dependent activity identified for this site.

PRELIMINARY - SUBJECT TO PUBLIC REVIEW AND REVISION